



**2024**  
**SUSTAINABILITY**  
**REPORT**

# About this report

This report is the second sustainability report released by Inner Mongolia Bao Gang United Steel Co., Ltd., following five consecutive years of publishing social responsibility reports. The report elaborates on the Company's efforts in environmental protection, social responsibility, and corporate governance in 2024, responding to the expectations and concerns of stakeholders.

## Reporting period

The reporting period covers January 1, 2024, to December 31, 2024, with some content extending beyond this range.

## Report scope

The report covers Inner Mongolia Bao Gang United Steel Co., Ltd., its subsidiaries, branches, and subordinates. For ease of expression and reading, "Inner Mongolia Bao Gang United Steel Co., Ltd." is also referred to as "Bao Gang United Steel", "the Company", or "we" in this report.

## Data sources and reliability assurance

The information and data disclosed in this report are sourced from the Company's official documents and statistical reports, reviewed by relevant departments. The Company pledges that the report contains no false records or misleading statements, and bears liabilities for the authenticity, accuracy and integrity of the report.

## Basis of preparation

- *Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG 6.0)* of China Enterprise Reform and Development Society, Responsibility Cloud Research Institute
- *Self-regulatory Guidelines for the Companies Listed on the Shanghai Stock Exchange No. 4 - Formulation of Sustainable Development Report* of Shanghai Stock Exchange
- *Global Reporting Initiative (GRI Standards)* of Global Sustainability Standards Board
- United Nations 2030 Sustainable Development Goals (SDGs)
- *Guidelines for State-owned Enterprises to Better Fulfill Social Responsibilities* of SASAC of the State Council

## Report accessibility

You can read the electronic version of this report by visiting the Investor Relations—Social Responsibility Report section on the website of Inner Mongolia Bao Gang United Steel Co., Ltd. at <https://www.baoganggf.com>, or by downloading it from the website of Shanghai Stock Exchange at <https://www.sse.com.cn/>.

# Contents

About this report	01
Address by chairman	04
About Bao Gang United Steel	06
New glory - 2024 responsibility events	10

## 01

### Environment “Steel” flowers bloom with green vitality

Strengthen environmental management	20
Combat with climate change	22
Promotion of green production	28
Protect ecological balance	36

## 02

### Society Build dreams and benefit the people

Customer orientation, quality first	40
Employee development	43
Deepen industry cooperation	53
Enhance people's well-being	57

## 03

### Governance Promote stability like a rock

Adhering to the leadership of Party building	62
Standardize corporate governance	66
Improvement of compliance system	68
Innovation-driven development	75

<b>Responsibility issue I:</b>	12	ESG management	80
Strengthening the brand and forging new materials for major national equipment		Future prospects	86
<b>Responsibility issue II:</b>	14	Annex	88
Empowering intelligence, and activating a new engine for the steel industry			
<b>Responsibility issue III:</b>	16		
Rare treasure house, broad prospects for diversified development			



## Address by chairman



2024 marks the 75th anniversary of the founding of the People's Republic of China, a crucial year for achieving the goals of the 14th Five-Year Plan, the 70th anniversary of the establishment of Baogang Group, and a year in which Bao Gang United Steel strives to break through under the severe test of a complex and ever-changing economic situation and a declining steel market. Over the past year, we have adhered to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implemented the spirit of the 20th National Congress of the CPC and the Second and Third Plenary Sessions of the 20th Central Committee, firmly grasped the main line of forging a strong sense of community for the Chinese nation, and resolutely advanced along the path of high-quality development.

**This year, we have anchored the "dual carbon" goals and built a highland for ecological civilization.** We have fulfilled our political responsibility to build an important ecological security barrier in northern China, completed carbon footprint calculations for all steel products, successfully released a green and low-carbon brand and a low-carbon emission steel process roadmap, completed ultra-low emission transformations, explored paths for energy conservation and emission reduction, and became the first steel enterprise in the region to pass the A-level performance evaluation for heavy pollution weather; vigorously promoted the projects with "extreme energy efficiency", becoming a cultivation enterprise for the industry's "Dual

Carbon Best Practice Energy Efficiency Benchmark Demonstration Plant"; comprehensively advanced the green process, successfully rolled automotive steel and alloy steel with high scrap ratio, and increased the "green content" of steel products.

**This year, we have adhered to a people-oriented approach and strengthened our sense of responsibility and mission.** We have accelerated the pace of adjustment towards high-end production lines and products, to meet market demand for high-performance steel and continuously enhancing brand influence; committed to building a harmonious and win-win employee relationship ecosystem, expanded "1 center + 4 stations" medical services, and continuously improved the employee care service system; on the basis of mutual respect and win-win cooperation, we have elevated strategic partnerships to a new level, with "jointly creating a new model for central-local cooperation and enhancing the resilience and industrial competitiveness of the coal coking chemical industry chain" being selected as an excellent case of central-local cooperation; promoted the spirit of dedication, cultivated new trends and styles of the times, and conducted 467 volunteer service activities throughout the year, with 13,780 participants in volunteer activities.

**This year, we have enhanced governance and remained steadfast in our progress.** We created the party-building brand "Iron Shoulders Bear the Mission, Furnace Fire Reflects the Original Aspiration", leading high-quality development with high-quality party-building; achieved effective connection and standardized operation of corporate governance, the information disclosure received the highest A-level (excellent) evaluation from the Shanghai Stock Exchange, with the ESG rating rising to "A-level"; carried out comprehensive reforms of state-controlled listed companies, accelerating the transformation towards innovation-driven and reform-empowered development; placed technology innovation in a critical position, with annual R&D investment intensity exceeding 5%, creating more favorable conditions for the continuous emergence of highly skilled talents.

Although dreams may seem distant, they can be achieved through relentless pursuit; although aspirations may be challenging, they can be realized with unwavering perseverance. Standing at the new starting point of the 70th anniversary of Baogang Group and based on the new height of fulfilling the mission and tasks of state-owned enterprises, we will unite more closely around the Party Central Committee with Comrade Xi Jinping at its core, and with full spirit, set sail again on the new journey filled with infinite glory!



A handwritten signature in black ink, appearing to be the name of the Chairman of Bao Gang United Steel Co., Ltd.

Chairman of Bao Gang United Steel Co., Ltd.

# About Bao Gang United Steel

## Company overview



Bao Gang United Steel was established in 1954. It is one of the 156 key projects during the First Five-Year Plan, and the only steel enterprise for which Premier Zhou Enlai personally cut the ribbon for its production. The historical story of "uniting efforts to build Bao Gang United Steel" mentioned by General Secretary Xi Jinping originated here, making Bao Gang United Steel's development highly notable and far-reaching. In 1999, to create a steel listed company, Bao Gang United Steel established Inner Mongolia Bao Gang United Steel Co., Ltd. mainly with rolling assets, which was officially listed on the Shanghai Stock Exchange on March 9, 2001, with the stock code 600010. Over the 20 years since its listing, Bao Gang United Steel's total assets have increased 20-fold, with equity financing reaching RMB 45.935 billion, and its market capitalization has grown from RMB 8 billion to a peak of over RMB 230 billion, making it an important steel industrial base in China.

Bao Gang United Steel leverages the resource endowment of co-existing iron and rare earth in Bayan Obo, creating the unique "rare earth steel" feature. Its products are widely recognized and praised by downstream users for their good ductility, wear resistance, corrosion resistance, low-temperature resistance, toughness, and tensile strength. The products are extensively used in national key projects such as the Beijing-Shanghai High-Speed Railway, the Qinghai-Tibet Railway, the Three Gorges Dam Project, Beijing Daxing International Airport, and the Sino-Russian Eastern Natural Gas Pipeline, and are exported to 60 countries and regions including Europe and America. After years of development, in 2024, the brand value of Bao Gang United Steel reached RMB 26.159 billion, an increase of RMB 1.549 billion compared to 2023. It was awarded the 2024 Inner Mongolia Brand Construction Benchmark Enterprise, marking its seventh consecutive year on the list. It was also included in the 2024 List of Advanced Manufacturing Enterprises and selected as one of the "2024 China Excellent Steel Enterprise Brands".

Currently, Bao Gang United Steel has a crude steel production capacity of 17.5 million tons, It can produce key products such as heavy rails, wind power plates, wear-resistant steel, zinc-aluminum-magnesium coated steel plates, pipeline steel, home appliance steel, automotive steel, and oil pipes. The overall equipment level is internationally leading, and thus forming a production pattern of four high-quality lines: plates, pipes, rails, and wires.



## Company culture

<b>Company goal</b>	Building the world's best rare earth steel new material production base, and an excellent supplier of high-quality rare earth steel new materials	<b>Company mission</b>	Dedicate High-Quality Steel, Create a Better Life Together
<b>Company spirit</b>	Persistent and Dauntless, Above and Beyond	<b>Company vision</b>	Distinctive Steel, Green Homeland

## Main business

<b>Plates</b>	With CSP, wide and thick plate, internationally advanced 2250 mm hot continuous rolling, and supporting cold rolling continuous annealing and galvanizing production lines, and a capacity of 9.7 million tons, the Company is the largest plate production base in the central and western China.	<b>Heavy rail profiles</b>	With 2 world-class large-scale universal rolling production lines and waste heat quenching production lines, and a capacity of 2.1 million tons, the Company is the world's highest-equipped and largest high-speed rail production base.
<b>Seamless steel pipe</b>	With 5 seamless pipe production lines of 159 mm and 460 mm diameters, and an annual production capacity of 2 million tons, the Company is one of the most comprehensive seamless pipe production bases in China.	<b>Wires</b>	With 3 production lines for strip steel, and a capacity of 2 million tons, the Company is an important high-end wire rod production base in the northwest China.

Looking to the future, Bao Gang United Steel will adhere to the dual main businesses of "steel + resource development", grasp the new development stage, adhere to new development concepts, and integrate into the new development pattern. It will unswervingly follow a new path of high-quality development guided by ecological priority and green development, fully promote the construction of "carbon peaking and carbon neutrality" planning projects, and strive to achieve an annual production of 14.62 million tons of iron, 15.64 million tons of crude steel, 14.76 million tons of commodity billets, 390,000 tons of rare earth concentrate, and 650,000 tons of fluorite concentrate by 2025. Achieve a product structure characterized by "high-quality steel + series rare earth steel", focus on the industrial chain with "cold rolling deep processing + steel pipe deep processing" as the key, aim to become a leading domestic comprehensive supplier and service provider of rare earth steel new materials, adopt the operation mode of "deep potential tapping + reform and innovation", focus on refining and optimizing, achieve first-class comprehensive competitiveness in the domestic market, and become a practitioner of the brand-oriented, high-end, green, and intelligent transformation and development of China's steel industry.

## Company history

**2012**

The Company acquired 100% equity of Barun Mining Co., Ltd. held by Baogang Group and the mining rights of the West Mine of Bayan Obo Iron Ore.



**2001**

The Company was officially listed on the Shanghai Stock Exchange.



**2009**

The Company's annual capacity of steel reached 10 million tons, joining the ranks of domestic steel enterprises with an annual output of over 10 million tons.



**1999**

Inner Mongolia Bao Gang United Steel Co., Ltd., Ltd. Was established.



**2016**

The rare earth steel plate project was fully completed, which marked a milestone in the transformation and upgrading of the steel industry in the autonomous region.



**2015**

The Company acquired the mineral processing-related assets of Baogang Group, the iron selection-related assets and tailings pond assets of the Bayan Obo Comprehensive Utilization Project.



**2017**

The Company acquired the rare earth and niobium selection-related assets of the Bayan Obo Resource Comprehensive Utilization Project of Baogang Group's Baoshan Mining Co., Ltd., accelerating the development and utilization of the Company's tailings pond resources.



**2023**

An 800,000-ton fluorite beneficiation production line and a fluorochemical production line were built, achieving large-scale development and utilization of fluorite resources and deep processing of fluorite resources.



**2018**

The Company acquired the assets of China Northern Rare Earth's rare earth concentrator, increasing the production capacity of rare earth concentrate to 450,000 tons, which also resolved the issue of competition between the two companies.

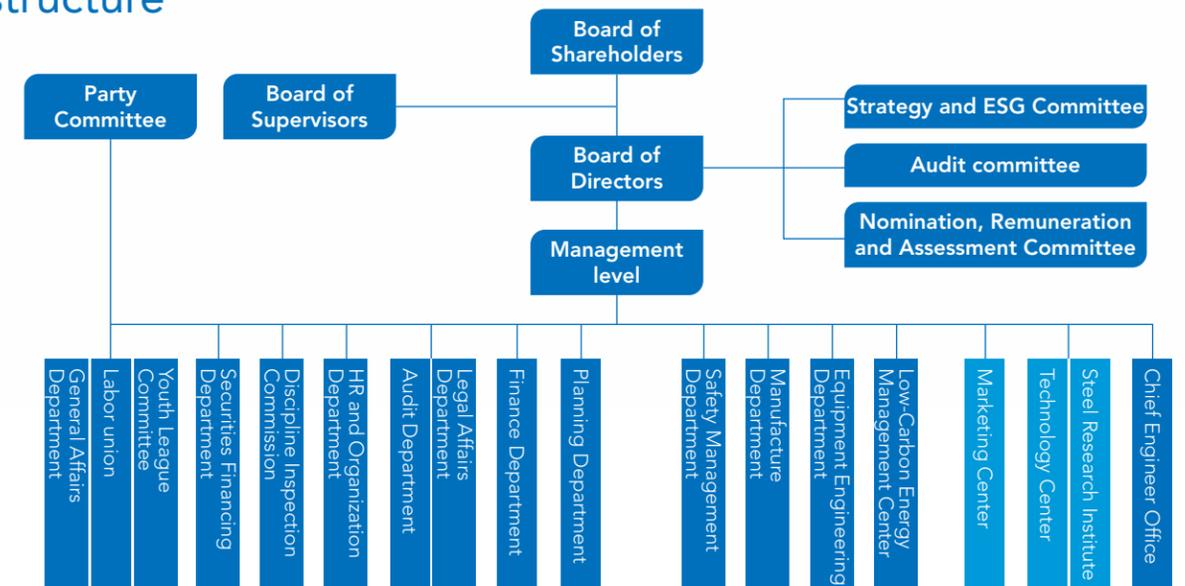


**2024**

The Company adhered to the product structure adjustment strategy of "high-quality steel + series rare earth steel", with sales of variety steel reaching 8.1634 million tons, a year-on-year increase of 9.65%, and rare earth steel production exceeding 1.5 million tons, reaching a record high.



## Organizational structure



# New glory - 2024 responsibility events



In January 2024, 8 products including low-alloy structural steel medium-thick plates declared by Bao Gang United Steel were named "Golden Cup Quality Products" for the physical quality of metallurgical products.

Taking the opportunity of celebrating the 70th anniversary, Bao Gang United Steel further promoted the deep integration of party building and production and operation, creating the party-building brand of Bao Gang United Steel "Iron Shoulders Bear the Mission, Furnace Fire Reflects the Original Aspiration".



On January 30, 2024, Bao Gang United Steel was awarded the honorary title of "Dual Carbon Best Practice Energy Efficiency Benchmark Demonstration Plant" for the 2023 Steel Projects with Extreme Energy Efficiency. On September 24, Bao Gang United Steel's green and low-carbon brand and low-carbon emission steel process roadmap were officially released.

On May 9, 2024, Bao Gang United Steel held a completion ceremony for the carbon reduction and pollution reduction upgrading and transformation project of the non-oriented silicon steel annealing furnace of the rare earth steel cold-rolled plate plant.



包钢股份 600010.SH  
所属万得三级行业：  
金属、非金属与采矿  
ESG综合得分：7.29/10  
行业排名：14/293

In June 2024, thanks to its excellent management performance in ESG, Bao Gang United Steel's ESG rating jumped two levels from "BB" to "A".

In July 2024, the scientific and technological achievement of "new green and low-carbon new technology and equipment for fully dry sensible heat recovery of converter gas" co-developed by Bao Gang United Steel successfully passed the evaluation of the evaluation committee. This scientific and technological achievement has reached the international leading level.



In July 2024, Bao Gang United Steel's independently completed "Seamless Steel Pipe Packaging System Upgrade and Optimization Research" and its participation in the completion of "key technology development and application of high-quality rare earth intermediate alloy preparation" won the second prize of the Metallurgical Science and Technology Award.

In August 2024, Bao Gang United Steel was officially approved to be included in the 2024 List of Advanced Manufacturing Enterprises, which means that Bao Gang United Steel has been recognized by national authoritative departments in terms of cutting-edge technological advancement and exemplary development quality.



In August 2024, the country's first 100-meter rail crane remote control project was successfully implemented in Bao Gang United Steel and has been officially put into use in the rail and beam factory.

On August 21, 2024, 20 sets of 40 carriages loaded with 25-meter rail products were successfully dispatched under the traction of locomotives. This is the first shipment organized by Bao Gang United Steel in accordance with the new 25-Meter Rail Loading Plan.



On September 24, 2024, the 2024 Bayan Lecture Hall - High-end Forum on the Application of Rare Earths in Steel and the "high-quality steel + series rare earth steel" Strategic Product Seminar was held by Bao Gang United Steel at Baogang Hotel.

In November 2024, Bao Gang United Steel issued the Group Standard for High-Strength Steel Plates with Low Welding Crack Sensitivity for Engineering Machinery and entered the formal implementation stage.



In December 2024, Bao Gang United Steel's brand "BISG" was on the list for seven consecutive years with a brand value of RMB 26.159 billion. Bao Gang United Steel was named a benchmark enterprise for brand building in Inner Mongolia.

In December 2024, Bao Gang United Steel's "Pipe Processing Intelligent Coupling Line Application Case of Steel Pipe Branch" was successfully selected into the 2024 List of Typical Application Cases of Advanced Computing Empowering New Quality Productive Forces. This project is the only project selected in the Inner Mongolia Autonomous Region and is also one of the four projects selected in the steel industry.

2024年先进计算赋能新质生产力典型应用案例名单

一、传统产业领域（35项）

序号	案例名称	建设单位	所属地区
1	“双碳”智能管控与优化系统	中国科学院金属研究所	北京市
2	移动式智能巡检系统	北京材料科技股份有限公司	北京市
3	移动式智能巡检系统 Galloy-EDM	国家增材制造创新中心	天津市
4	钢铁智能制造生产与运营平台	包头钢铁有限公司	内蒙古
5	钢铁行业智能制造与运营平台	内蒙古钢铁有限公司	内蒙古
6	中德联合智能制造系统	中德联合智能制造系统	辽宁省



Bao Gang United Steel has newly built four occupational health and medical stations for rare earth steel, rail beams, ironmaking, and steelmaking, forming a medical service model with the factory outpatient clinic as the center + four stations, enabling the factory to organize emergency rescue and emergency first aid in a timely manner in the event of an emergency.

# 2024 Chronicle

## Responsibility issue I

### Strengthening the brand and forging new materials for major national equipment

#### Focus on innovation and research high-end materials

Bao Gang United Steel has made accelerating the development of new quality productive forces and steadily promoting high-quality development its key work tasks, placing "innovation" at the core position, implementing a rigid growth mechanism for R&D investment, constantly activating innovation systems and mechanisms, expanding the proportion of mid- and high-end products, and is committed to achieving key breakthroughs in the field of rare earth steel new materials.

##### Rare earth welding wire steel

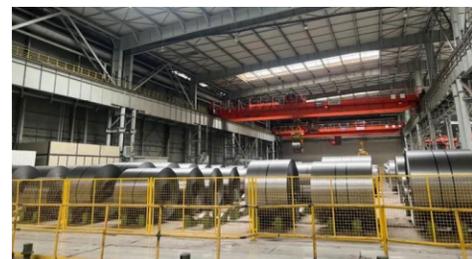
In October 2024, based on long-term technological accumulation, the Company innovatively researched and developed rare earth additives and their application technologies, and successfully launched China's first new rare earth welding wire steel product, achieving significant improvements in the drawing and welding properties of the new rare earth welding wire steel, providing new materials for China's welding fields.



Nationwide Launch of Rare Earth Welding Wire Steel

##### Ultra-high strength cold-rolled dual-phase steel

In August 2024, the Company successfully rolled out the first 1,180 MPa cold-rolled dual-phase steel coil, marking a new era in ultra-high strength steel products. This achievement broke through the strength limit design capability of the rare earth steel cold-rolled plate plant's product catalog, signifying a milestone in the Company's cold-rolled product variety adjustment.



1,180 MPa Cold-Rolled Dual-Phase Steel

##### Enhanced weather resisting steel

In December 2024, the Company successfully developed and rolled out rare earth atmospheric corrosion resistant steel with high strength and high weather resistance. This steel effectively resists various corrosive media in the atmosphere, achieving a qualitative leap in corrosion resistance while reducing resource waste and environmental pollution, showcasing the Company's strong capabilities in rare earth steel technology innovation and product development.



Rare Earth Weather Resisting Steel

Relying on the unique advantage in "rare earth steel", Bao Gang United Steel has always adhered to the goal of "the world's best rare earth steel new material production base, and an excellent supplier of high-quality rare earth steel new materials" for many years, and continuously deepened the strategic results of "high-quality steel + series rare earth steel". "Rare earths in steel make it harder, tougher and stronger" has become the Company's brand logo. In 2024, Bao Gang United Steel continued to promote the plan of launching new products. 15 new products were launched for the first time in the industry and Bao Gang United Steel, with cumulative sales of 18,900 tons and new economic benefits of RMB 8.1365 million.

#### Respond to strategy, create extraordinary projects

Bao Gang United Steel actively participates in national key engineering projects, with products widely used in major national projects such as the "national treasures" FAST radio telescope sightseeing bridge, the Beijing-Shanghai High-Speed Railway, the Qinghai-Tibet Railway, the Three Gorges Project, the "China Lunar Exploration Program", and the Beijing Daxing International Airport. This not only represents Bao Gang United Steel's solid footprint in the national construction journey but also highlights its exceptional quality and strong capabilities, laying a solid foundation for national development and modernization.

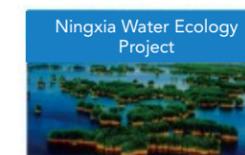
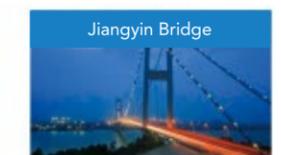


Case: Bao Gang United Steel successfully delivered 500 meters of high-quality rail and pioneered laying on the Jining-Datong-Yuanping High-Speed Railway

The Jining-Datong-Yuanping High-Speed Railway is a key construction project in China's 14th Five-Year Plan and an important part of the "eight verticals and eight horizontals" high-speed rail network's Hohhot-Nanning Corridor. On May 15, 2024, Bao Gang United Steel successfully delivered and pioneered the laying of 2,430 tons of 60N U71MnH G rail on the Jining-Datong Section of the entire line. This rail type offers superior hardness, wear resistance, and longer service life, ensuring safer, smoother, and more efficient train operations.



60N U71MnH G Rail Laying Site



## Responsibility issue II

### Empowering intelligence, and activating a new engine for the steel industry

#### Achieve "one-click" production

Bao Gang United Steel is gradually building a full-life-cycle intelligent steel enterprise, from intelligent equipment to digital workshops, and then to intelligent factories, realizing the closed-loop of intelligent manufacturing, end-to-end marketing, and supply chain ecosystem, further improving production efficiency, greatly enhancing employee satisfaction and quality of life, demonstrating the Company's profound social responsibility.

##### • Introduce intelligent equipment

In 2024, Bao Gang United Steel had successfully put 23 sets of industrial robots into operation, achieving the goal set by the Group to replace human labor in 91 "3D" positions within 3 years, gradually realizing unattended production processes, remote centralized control, and one-click production, with a numerical control rate of 83.17%. At present, 196 intelligent equipment projects including industrial robots, online equipment monitoring, and intelligent lubrication have been implemented in 89 application scenarios.

In 2024, Bao Gang United Steel's Steel Pipe Branch's "Pipe Processing Intelligent Coupling Line Application Project" was the only case in Inner Mongolia Autonomous Region selected by the Ministry of Industry and Information Technology as a typical application case of "Advanced Computing Empowering New Quality Productive Forces", and also one of the four projects selected in the steel industry.

#### ★ Case: Bao Gang United Steel introduced intelligent coal quality inspection robot system

As a smart "health examiner" for coal samples, the intelligent coal quality inspection robot system can fully automatically detect items such as ash, volatile matter, sulfur, hydrogen, and calorific value in coal. In October 2024, after the introduction and use of this system by Bao Gang United Steel's Chemical Inspection Center, it improved work efficiency, reduced employee labor intensity, and enhanced the accuracy and fairness of inspection data.



Intelligent Coal Quality Inspection Robot System

Bao Gang United Steel closely follows the national strategy for industrial Internet development, actively integrates into the grand blueprint of national manufacturing digital transformation and the "Digital Inner Mongolia" construction. Upholding the core concepts of "green, intelligent, innovative, and shared", driven by intelligent production and smart operation, it fully promotes the grand construction of intelligent manufacturing, striving to create a digital benchmark in the steel industry.

##### • Build digital workshops

Bao Gang United Steel has focused on advancing 7 smart workshop pilot projects, including the cold zone centralized control of the rail and beam plant and the one-click steelmaking project in the steelmaking plant, and has completed the optimization and iterative upgrades of related scenarios. It has cultivated the beam and rail, wide and thick plate production lines and the Barun smart mining site as digital and intelligent demonstration production lines, accumulating replicable and promotable digital and intelligent application experiences, promoting more transparent production processes and more refined management, providing solid technical support for achieving lean production.

##### • Building an intelligent factory

Bao Gang United Steel actively introduces digital and intelligent technologies, relying on the intelligent control platform to achieve real-time monitoring and precise scheduling of production processes, which optimizes resource allocation, improves production efficiency, and provides valuable experience for the intelligent transformation of the steel industry.



Rare Earth Steel Plate Plant's AI Assistant Empowers "Smart Hot Rolling"

#### Build "smart" operations

Based on the construction of smart factories, Bao Gang United Steel has gradually established an integrated business and finance platform, strengthened the digitalization of the cost accounting process and the intelligent management of the production process, realized the close connection and real-time data transmission and sharing of various management links such as production, sales, procurement, and finance, optimized internal processes, improved the scientificity and accuracy of decision-making, and enhanced the operational efficiency and management level of the enterprise.

#### ★ Case: Bao Gang United Steel successfully issued its first electronic invoice

On March 21, 2024, Bao Gang United Steel successfully issued its first electronic invoice through the Inner Mongolia Electronic Taxation Bureau platform of the State Taxation Administration, marking Bao Gang United Steel's active response to the tax electronic reform and further promoting the deep digitalization of Bao Gang United Steel's integrated business and finance.



Bao Gang United Steel's First Electronic Invoice

## Responsibility issue III

### Rare treasure house, broad prospects for diversified development

#### Bayan Obo Mine

Bayan Obo has long been known as the "rich divine mountain" and the "world's hometown of rare earth", with its abundant mineral resources being one of its advantages. The Bayan Obo Mine is a globally renowned polymetallic co-associated deposit of iron, rare earths, niobium, scandium, and fluorite, divided into the Main Mine, East Mine, and West Mine. The West Mine belongs to Bao Gang United Steel, a co-associated deposit of iron and rare earths, with a cumulative proven iron ore reserve of 660 million tons and an annual mining capacity of 10 million tons.

Bayan Obo Mine resource reserves:

Cumulative proven iron ore reserves of

**1.26** billion tons

Niobium reserves second only to Brazil,

**ranking second in the world**

**World's largest**

rare earth reserves

**Largest**

associated fluorite reserves in China



Bayan Obo Mine

In January 2024, the Fluorite Beneficiation Company and Fluorine Chemical Company construction projects achieved breakthrough progress, faster than the previously disclosed 7-year production and construction period, completing production and construction ahead of schedule, promoting the high-efficiency recovery and high-value utilization of associated fluorite resources in the Bayan Obo Mine, achieving the expected investment return target, and becoming a new profit growth point for Bao Gang United Steel.

Against the backdrop of increasingly fierce global resource competition and the grand era of promoting sustainable development domestically, Bao Gang United Steel, centered on the Bayan Obo resources, has built the resource and comprehensive utilization industry into the third main business and the third pole of development, in line with the national strategic resource development plan and layout. The Company promotes the comprehensive utilization of Bayan Obo resources, builds the largest niobium and fluorite industry in China, fully taps the production capacity, resource-saving capacity, resource conversion capacity, and green development capacity of self-owned resources, and strives to create a demonstration base for the comprehensive utilization of polymetallic resources.



Case: New minerals shine and strengthen the "security chain" of strategic resources

The Bayan Obo Mine is a vital strategic resource treasure trove for the nation and the primary resource supporting Bao Gang United Steel's development. In 2024, the Bayan Obo Mine successively discovered new minerals such as Obo Niobium, Zhai Scandium Amphibole, Fluorocarbon Calcium Neodymium, and Fuyuan Niobium, which continuously provides strong support for the security of the national strategic resource industry chain and supply chain.



Niobium-Scandium New Minerals Release Conference and Niobium-Scandium Resource Comprehensive Utilization Academic Seminar

#### Tailing pond

In 2015, the Company invested RMB 26.8 billion to acquire the Group's tailings pond resources. The tailings pond resources amount to approximately 200 million tons, with rare earth reserves equivalent to 13.82 million tons of oxides, making it the world's second-largest rare earth mine. In 2018, the Company acquired the assets of China Northern Rare Earth's rare earth concentrator, increasing the production capacity of rare earth concentrate to 450,000 tons,

#### Comprehensive resource utilization

To maximize resource value and continuously enhance industrial competitiveness, the company leverages its resource advantages, rapidly advances the construction of the hydrogen-based mineral phase transformation project for medium and low-grade oxidized ores, deepens the utilization of iron ore resources; based on fluorite resources, integrates with Baotou City's fluoromaterial industry planning, couples with Bao Gang United Steel and surrounding resources, develops high-performance fluoropolymers, and extends the industry into fluorosilicone resins and functional membrane materials; accelerates the technological upgrade of coke by-products and the construction of comprehensive gas utilization projects, extends the benzene hydrogenation and tar deep processing industry chain, conducts technical reserve research, and develops more high-value-added products.



# Environment

## "Steel" flowers bloom with green vitality

The rise of green beauty is timely, and ecological civilization paints a splendid chapter. Guided by the concept of "a community of shared life between humans and nature", Bao Gang United Steel deeply practices the era proposition of "lucid waters and lush mountains are invaluable assets", and integrates ecological civilization construction into the development genes of the enterprise. Based on the national "carbon peaking and carbon neutrality" strategic goal, the Company reconstructs the environmental governance paradigm with systematic thinking, builds an ecological management system covering the entire industry chain, incorporates climate governance into the core strategy, innovates and implements coordinated actions for energy conservation, carbon reduction, and pollution reduction, promotes the green transformation of the entire production process, builds a green urban steel plant, and injects steel power into the painting of a beautiful China with bluer skies, greener mountains, and clearer waters.

### Key performance

The number of environmental pollution incidents and environmental fines faced within the fiscal year are both **0**

Carbon emission intensity in 2024 decreased by **1.86%** compared to 2023

Completed self-generated electricity of **6.5** billion kWh, reducing external electricity purchase costs by RMB **575** million year-on-year

The greening coverage rate of the plant area is **50.1%**

The first steel enterprise with A-level

performance in heavy pollution weather in Inner Mongolia Autonomous Region

The title of "Green Development Benchmark Enterprise"

by China Metallurgical News



01

ENVIRONMENT

## Strengthen environmental management

Bao Gang United Steel deeply cultivates the foundation of green development, adheres to the concepts of green, circular, and low-carbon development, improves the environmental management system, enhances environmental risk prevention awareness, solidifies environmental responsibilities, establishes environmental emergency mechanisms, and promotes standardized, normalized, and long-term environmental management. In 2024, Bao Gang United Steel was awarded the title of "Green Development Benchmark Enterprise". and "Clean Production and Environment Friendly Enterprise in Iron and Steel Industry in China"

### Governance

Bao Gang United Steel resolutely implements the environmental responsibility requirements of "joint responsibility of the party and government, dual responsibilities for one position, and accountability for dereliction of duty", appoints one assistant general manager in charge of environmental protection, and manages environmental protection work professionally through the Manufacture Department. The Manufacture Department has 1 environmental protection director, 1 director of the environmental protection management office, and 3 professional management groups, including 15 professional technicians. There are a total of 47 environmental protection managers and specialists in secondary organizations.

### Strategies

Bao Gang United Steel identifies its own environmental risk sources, formulates environmental risk prevention and emergency measures systems, designates key positions or responsible agencies for environmental risk prevention, and establishes regular inspection and maintenance responsibility systems.

Risks	Measures
The quality of personnel is uneven, environmental awareness is weak, and there is insufficient identification of environmental factors in positions.	The Company organizes employees to participate in the identification of job environmental factors, strengthens the professional knowledge and ability training of environmental protection management personnel, and improves its overall environmental protection management level.

## Impact, risk, and opportunity management

Bao Gang United Steel strictly complies with the relevant requirements of the *Environmental Protection Law of the People's Republic of China* and the *Environmental Protection Tax Law of the People's Republic of China* and other laws and regulations, formulates environmental management manuals, procedural documents, and management systems, further improves the environmental management system and institutions, enhances the environmental protection emergency mechanism, and fosters an environmental protection atmosphere. The Company has passed the environmental management system certification and regularly conducts reviews to ensure the scientific and effective management of environmental compliance.

### • Environmental emergency mechanism

Through on-site investigations and data collection, Bao Gang United Steel identifies environmental risk receptors around the Company. According to the *Risk Classification Method of Enterprise Environmental Emergencies*, it accurately assesses the environmental risk level and formulates practical emergency plans for environmental emergencies. After the occurrence of

an environmental emergency, each secondary organization of Bao Gang United Steel establishes an emergency command organization based on the emergency plan for environmental emergencies, fulfills the initial disposal responsibilities, and is responsible for the initial organization and command of environmental emergencies. When a company-level environmental emergency occurs, Bao Gang United Steel and its secondary organizations conduct emergency linkage. Bao Gang United Steel establishes an emergency command headquarters responsible for issuing command orders, personnel, and material allocation. The secondary organization's emergency command headquarters provides real-time feedback and conducts emergency rescue as required, forming a more powerful emergency response synergy.

### • Creation of an environmental protection atmosphere

During "World Environment Day", "National Low-Carbon Day", and "Energy Conservation Publicity Week", Bao Gang United Steel carries out a series of promotional activities. Through morning meetings, "three meetings and one lesson", and other forms, it organizes employees to deeply study laws, regulations, and policy documents related to energy conservation and carbon reduction. Banners are hung and slogans are posted in office buildings and workshops. Public accounts are used to organize the study of regulations and policies and to watch promotional videos, effectively linking online and offline efforts to advocate for low-carbon living concepts and enhance the environmental protection awareness of all employees.



The Power Supply Plant Conducted Low-Carbon Promotion Activities on "World Environment Day"

## Indicators and goals

Indicator	Unit	2024
Environmental investment	RMB 100 million	37.71
Number of environmental pollution incidents	Item	0
Environmental fines faced during the fiscal year	RMB ten thousand	0
Proportion of sites with environmental risk assessments	%	100
Proportion of sites certified with ISO14001 environmental management system	%	100
Employee training coverage rate on environmental protection	%	100

In 2025, Bao Gang United Steel will promote the coordinated development of green manufacturing and green industries, achieve ultra-low emission transformation and long-term maintenance of A-level enterprise performance in heavy pollution weather; ensure no major or above sudden environmental incidents occur throughout the year.

## Combat with climate change

Bao Gang United Steel deeply recognizes the urgency and importance of addressing climate change. In accordance with the *Management Measures for Carbon Emission Trading (Trial)*, *Management Measures for Carbon of Baogang Group*, and *Management Measures for Carbon of Bao Gang United Steel*, the Company ensures that every decision and action meets the requirements of sustainable development, achieving harmonious coexistence between the enterprise and the environment.

### Governance

The Company mainly obtains climate-related risks and opportunities through its Party Committee and the general manager's office meeting reviewing the *Bao Gang United Steel Annual Energy Saving and Carbon Reduction Work Plan*, and manages risks and opportunities through low-carbon energy work meetings, reporting on energy and low-carbon work, and irregularly listening to related thematic reports and professional training; the Low-Carbon Energy Management Center fully undertakes all low-carbon energy management functions of the Bao Gang United Steel sector (including agencies). By the end of 2024, the Low-Carbon Energy Management Center had a total of 15 management and technical personnel.

### Strategies

Bao Gang United Steel comprehensively considers climate-related risks and opportunities from different dimensions such as time, space, and type, identifies and sorts out climate-related risks and opportunities from the two categories of physical risks and transition risks, and proposes a series of targeted response measures, effectively deploying climate risk response plans and seizing business opportunities.

Type	Reporting period	Measures
Short term	1-2 years	<ul style="list-style-type: none"> <li>Responses are made by formulating annual work plans, monthly summary and scheduling of work progress, and formulating emergency plans for sudden situations.</li> <li>The relevant energy-saving and carbon reduction projects planned for the year have been included in the Company's annual infrastructure and technical transformation investment plan, with continuous project demonstration throughout the year, and investment decisions are made in accordance with regulations.</li> </ul>
Medium term	5 years	<ul style="list-style-type: none"> <li>The formulation of the "14th Five-Year Plan" energy conservation special plan, as a mid-term industrial development response to climate change, provides an overall plan for the Company's current situation analysis, risk and opportunity identification, planning ideas, and goals in low-carbon and energy aspects.</li> </ul>
Long term	5 to 10 years and above	<ul style="list-style-type: none"> <li>Responding to the group-level carbon peaking and carbon neutrality work plan, clarifying the Company's "dual carbon" strategic direction, carbon peaking time, and carbon neutrality path.</li> </ul>

Risk type	Risk parameter	Potential impact	Measures
Physical risks	Acute risks	Increased severity and frequency of extreme weather events (such as heavy rain, snowstorms, etc.)	In recent years, the frequent occurrence of global extreme weather events may cause periodic interruptions in the Company's raw material and fuel supply, water resource supply, etc., thereby affecting production. <ul style="list-style-type: none"> <li>Hold annual meetings for flood prevention and ice prevention, and winter heating, establish working groups, and issue emergency plans.</li> </ul>
Transformation risk	Policies and laws and regulations	Expansion of the carbon market, carbon pricing mechanism, and increased costs	The constraints of industry energy conservation, emission reduction, and environmental protection policies are increasingly strengthened. The implementation of the <i>Management Measures for Carbon Emission Trading (Trial)</i> increases the penalty risks for enterprises participating in carbon trading. The expansion plan of the national carbon market is released, specifying that 2024 will be the first control year. The Company will participate in the national carbon market compliance trading carbon price, facing increased compliance costs and carbon price risks, thereby increasing production and operation costs and constraining the Company's strategic development. <ul style="list-style-type: none"> <li>Establish a low-carbon energy center, set up professional technicians to study policies, actively participate in industry and regulatory authority exchange training, timely interpret policy documents, learn carbon market and CBAM rules, and conduct company-level policy and regulation promotion training.</li> </ul>
		Carbon tariff	The EU National Committee announced the launch of the world's first "carbon border tax" plan, imposing tariffs on imported carbon goods including steel, cement, etc., which will inhibit the export of some of the Company's products, increase export costs, and affect revenue. <ul style="list-style-type: none"> <li>Strengthen carbon emission statistical accounting to ensure data accuracy and reliability.</li> </ul>
		Transformation of the "dual control" policy, enhanced carbon constraints	The shift from dual control of energy consumption to dual control of carbon emissions is an important measure for China to address global climate change and promote the comprehensive green transformation of economic and social development. Under this policy guidance, primary energy consumption will be further restricted, driving enterprises to transition towards renewable energy, new energy, and low-carbon development. The Company needs to invest in technology research and development, technology introduction, and facility upgrades during the transformation process, leading to increased investment and operational costs, which may impact revenue. <ul style="list-style-type: none"> <li>Develop a carbon peaking and carbon neutrality action plan, clarifying specific goals and key tasks for each stage.</li> </ul>

Technology and cost	Low-carbon technology transformation	In response to the national "dual carbon" goals and to achieve the Company's "dual carbon" goals, significant investment will be required in the future for the research and application of low-carbon metallurgical technologies. However, these technologies are still immature and carry considerable uncertainty.	<ul style="list-style-type: none"> <li>Conduct low-carbon metallurgy research based on the T80 list, and promote the application of technologies such as waste heat and energy recovery, elimination of high-energy-consuming equipment and process upgrades, intelligent scheduling, and comprehensive water-saving management.</li> </ul>
	Transformation cost	During the low-carbon transformation process, the Company will increase the research and application of energy-saving, environmental protection, and low-carbon smelting technologies, which will lead to increased costs and the risk of value loss in existing fixed assets.	<ul style="list-style-type: none"> <li>Optimize resource allocation to reduce long-term operational costs; seek policy support; promote technology innovation to lower the cost of low-carbon technologies.</li> </ul>
Market	Increased demand for green and low-carbon products	Driven by the trend towards green and low-carbon development, market demand for green and low-carbon steel products will continue to rise, intensifying industry competition. If the green transformation is slow, it may lead to a reduction in the Company's market share.	<ul style="list-style-type: none"> <li>Actively conduct research on low-carbon emission steel and organize EPD certification work, aiming to complete 3 EPD report certifications by 2024.</li> </ul>
	Rising raw material and fuel costs	Energy and resource prices are highly likely to rise due to the impact of climate change, thereby affecting the procurement costs of raw materials and fuels, leading to increased costs and other risks.	<ul style="list-style-type: none"> <li>Optimize procurement strategies to reduce reliance on single sources; invest in technology research and development to improve processes and enhance the utilization rate of raw materials and fuels.</li> </ul>
Reputation	Stakeholder concerns about climate change response measures	Investors and other stakeholders, as well as the general public, will pay more attention to the Company's climate change response measures and actions, even considering them as key indicators of the Company's performance. This may bring reputational risks to the Company's operations, requiring investment in resources to strengthen carbon management to meet their expectations.	<ul style="list-style-type: none"> <li>Actively respond to concerns, increase transparency; participate in public welfare campaigns, win recognition from all parties.</li> </ul>

## Impact, risk, and opportunity management

Bao Gang United Steel actively engages in carbon asset management and energy-saving and carbon reduction actions, continuously promotes carbon asset management, strengthens carbon emission control, and achieves efficient coordination and rational allocation. In 2024, Bao Gang United Steel completed the carbon footprint calculation for all steel products, continued to promote 18 energy-saving and carbon reduction projects, among which the distributed PV power generation project (Phase II) on the factory roof was connected to the grid, with an annual power generation of 20 million kWh, continuously improving the Company's energy conversion efficiency.

2024, continued to promote energy-saving and carbon reduction projects

18

Prepare greenhouse gas emission reports	Completed the preparation of the 2023 greenhouse gas emission reports for the steel sector and two managed power plants, and successfully passed the verification by a third-party verification agency commissioned by the Department of Ecology and Environment of Inner Mongolia Autonomous Region.
Conduct carbon inventory for the steel sector	Investigated and sorted out the sources of carbon data parameters and statistical methods involved in the legal boundaries of steel production and the ten major processes, further clarifying the carbon data and management processes at each stage.
Build a digital carbon management platform	The platform can achieve online reporting of the Company's carbon emission data parameters, electronic storage of supporting materials, and other functions, meeting the national monthly data reporting requirements while significantly improving the quality of the Company's carbon emission data and the efficiency of accounting and analysis.
Participate in carbon emission trading	By completing the transformation of the thermal power plant's main pipe system to enhance heating capacity and other measures, the quota gap for Bayan Beneficiation Branch and Baogang Thermal Power Plant in this compliance period was reduced by 41,000 tons year-on-year, saving over RMB 4 million in compliance costs.
Participate in various emission reduction mechanisms	Actively utilized carbon market policies and carbon price rules, timely tracked the price trends of CEA and CCER, and through subscription and price locking, Bayan Beneficiation Branch and the managed Baogang Thermal Power Plant purchased a total of 70,000 tons of CCER at a price lower than CEA during the 2023 national carbon market compliance period, reducing compliance costs with a combination of CEA and CCER.
Low-carbon technology research and development	Adopted the GreenOre CleanTech's carbonization chemical process to produce high-purity calcium magnesium carbonate, iron-containing materials, green negative carbon micro-powder, and other products, truly achieving the resource utilization of solid waste and permanent reduction and sequestration of CO <sub>2</sub> ; built a CCUS full industrial chain demonstration project, contributing to energy conservation, emission reduction, and low-carbon economic development in China's steel industry; through four rounds of industrial tests on high scrap ratio in converters, continuously optimized and adjusted production processes, determined the carbon reduction process path of "increasing converter scrap ratio + optimizing raw material structure + increasing green power ratio + extreme energy efficiency improvement", achieving a 40% reduction in carbon emissions.
Conduct EPD certification for steel products	Release EPD reports for cold-rolled steel strip, rail, and hot-rolled steel plate and strip on the CISA EPD platform, providing downstream users with transparent and comparable environmental product declaration information throughout the product lifecycle.
Green product design	Own two green trademarks, "BGreeREX" and "BGreeEX", divided into two series: "Low Carbon Emission Rare Earth Steel" and "Low Carbon Emission Steel".



Product EPD Report

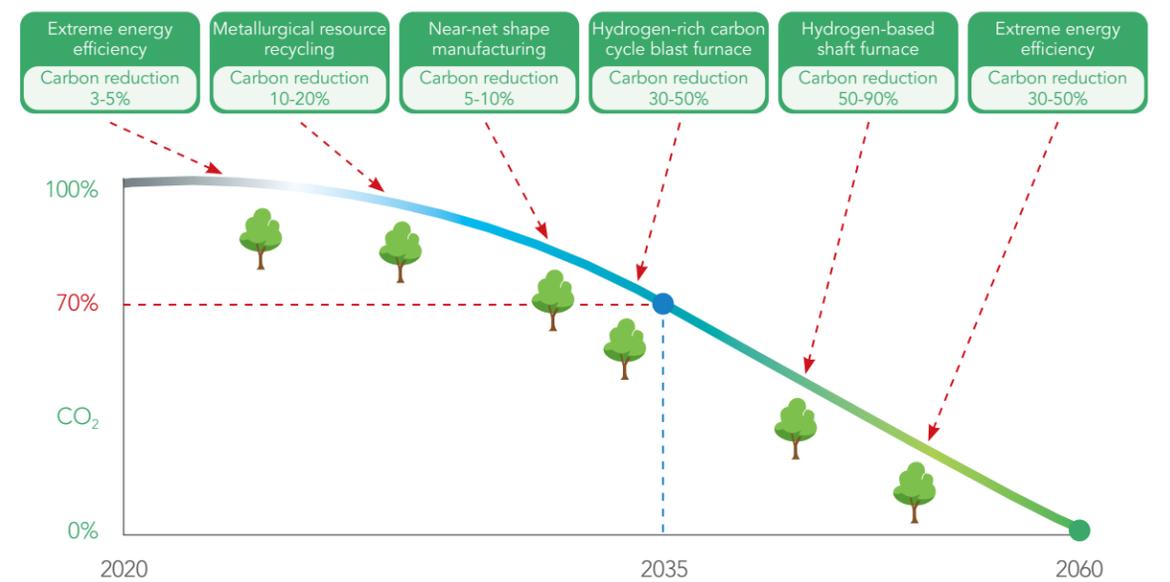
Case: Bao Gang United Steel's pipeline tubes supported CCUS project construction

In December 2024, Bao Gang United Steel's Steel Pipe Branch developed and produced pipeline tubes for the first time, providing material support for Baogang Group's 2 million tons (Phase I: 500,000 tons) CCUS full-industry-chain demonstration project, while also accumulating product and technical reserves for Bao Gang United Steel to achieve its "dual carbon" goals.



CCUS Full-Industry-Chain Demonstration Project

Indicators and goals



Bao Gang United Steel's "Dual Carbon" Technology Roadmap

## Promotion of green production

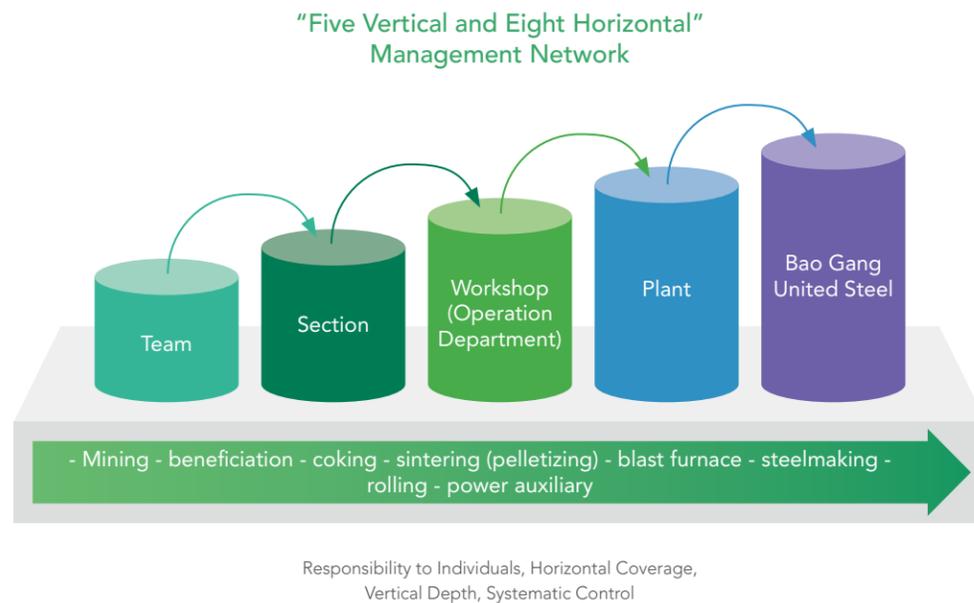
Bao Gang United Steel comprehensively implements the green development concept, adhering to the coordinated advancement of carbon reduction, pollution reduction, green expansion, and growth, actively optimizing the energy structure, improving water resource efficiency, strictly controlling pollutant emissions, and promoting the reduction, recycling, and harmless treatment of solid waste. In 2024, Bao Gang United Steel was recommended as the 2024 China Steel Industry Clean Production Environment-Friendly Award-Winning Enterprise.

## Energy utilization

Bao Gang United Steel strictly follows the requirements of the *Energy Law of the People's Republic of China* and the *2024-2025 Energy Conservation and Carbon Reduction Action Plan*, formulating and issuing energy management manuals, procedural documents, energy-related management systems, and daily assessments, continuously improving the energy management system. As of 2024, Bao Gang United Steel and all its subsidiaries have established an energy management system that complies with national standards (GB/T23331) and has passed third-party certification for the energy management system.

### • Governance

Bao Gang United Steel has established a 5-layer vertical management hierarchy consisting of teams, sections, workshops (operation departments), plants, and Bao Gang United Steel itself, following the principle of "responsibility to individuals, horizontal coverage, vertical depth, and systematic control". It forms an "five vertical and eight horizontal" energy management network with 8 processes: mining, beneficiation, coking, sintering (pelletizing), blast furnace, steelmaking, rolling, and power auxiliary.



### • Strategies

Risks	Measures
Unauthorized use of energy without approval, or use not in accordance with approved conditions	<ul style="list-style-type: none"> <li>New, modified, or expanded projects must complete relevant procedures as required and cannot be altered arbitrarily after approval.</li> </ul>
Low energy utilization	<ul style="list-style-type: none"> <li>Promote energy-saving technologies and equipment to reduce energy consumption;</li> <li>Establish and improve energy emergency mechanisms to respond to emergencies;</li> <li>Enhance energy-saving awareness and reduce energy waste.</li> </ul>
Transformation cost increase	<ul style="list-style-type: none"> <li>Optimize resource allocation to reduce long-term operating costs;</li> <li>Seek policy support to obtain government subsidies;</li> <li>Promote technology innovation to reduce low-carbon technology costs.</li> </ul>

### • Impact, risk, and opportunity management

Bao Gang United Steel is committed to balancing business development with energy conservation and emission reduction. By implementing various energy-saving measures, it effectively improves resource utilization efficiency, accelerates the formation of a resource-saving and environmentally friendly industrial structure, and supports the Company's carbon peaking and carbon neutrality goals.

### Improve utilization efficiency

Bao Gang United Steel emphasizes strengthening the linkage and coordination between energy and production, focusing on improving the efficiency of energy production, conversion, and utilization, enhancing sintering and blast furnace utilization coefficients, optimizing raw material structures, and reducing fuel consumption per unit. It systematically balances gas resources, conducts electricity-saving initiatives, increases power generation while reducing external purchases, and persists in the "light off" campaign, planning projects to reduce emissions. In 2024, the Company's comprehensive energy consumption per ton of steel was **629.11 tons of standard coal per ton of crude steel**, a year-on-year decrease of **2.8%**.

Case: Bao Gang United Steel was awarded the honorary title of "Dual Carbon Best Practice Energy Efficiency Benchmark Demonstration Plant" for the Steel Projects with Extreme Energy Efficiency.

Bao Gang United Steel has achieved significant improvements in the energy efficiency levels of major processes through measures such as energy structure adjustment, accelerated energy-saving technological transformation, and equipment efficiency enhancement. In 2024, Bao Gang United Steel was honored with the titles of "Dual Carbon Best Practice Energy Efficiency Benchmark Demonstration Plant" for the 2023 Steel Projects with Extreme Energy Efficiency and outstanding progress enterprise in the "Three-Year Action Plan for Energy Efficiency Benchmarking" for the 2024 Steel Projects with Extreme Energy Efficiency.



### Use clean energy

In terms of green electricity trading, Bao Gang United Steel actively participates in the market, continuously increasing the proportion of externally purchased green electricity, effectively reducing the Company's total carbon emissions; actively deploys clean energy, promoting the optimization of energy mix. By 2024, Bao Gang United Steel completed **6.5 billion kWh** of self-generated electricity, reducing external electricity purchase costs by **RMB 575 million** year-on-year; a **41.44 MW** rooftop PV power generation project has been completed, with the green electricity trading ratio reaching **50%**.



Main Construction of the Wind Farm for the Bayan Obo Mine District Green Electricity Direct Supply Project



Bayan Obo Iron Mine Welcomes Its First Hybrid Electric Mining Truck

### Indicators and goals

#### Indicator

Indicator	Unit	2024
Total energy consumption	Tce coal	9,431,287
Total energy consumption per million revenue	Tce coal	138.51
Comprehensive energy consumption per ton of steels	Ton of standard coal / ton of crude steel	629.11
Steam consumption	Tce coal	867,641.35
Total fuel oil consumption	Ton	38,225.08
Coal consumption	Ton	9,782,357.68
Diesel oil consumption	Ton	38,156.71
Gasoline consumption	Ton	68.37
Waste heat energy consumption	Tce coal	867,641.35
Waste heat and energy recovery utilization rate	%	85.15
Renewable energy consumption (PV)	kWh	117,680

### Goal



- According to the target requirements of Baogang Group's "14th Five-Year Energy Saving Plan", the comprehensive energy consumption per ton of steel will decrease by **5%** by 2025.
- According to the *Steel Industry Energy Saving and Carbon Reduction Special Action Plan*, by the end of 2025, the proportion of production capacity above the energy efficiency benchmark level in the steel industry will reach **30%**, and production capacity below the energy efficiency baseline level will complete technological transformation or be phased out.

### Utilization of water resources

Bao Gang United Steel integrates the concept of water conservation throughout the entire production and operation process, strengthens the construction of water resource management systems, achieves refined control of water resources, and sets a benchmark for water conservation in the steel industry.

#### • Governance

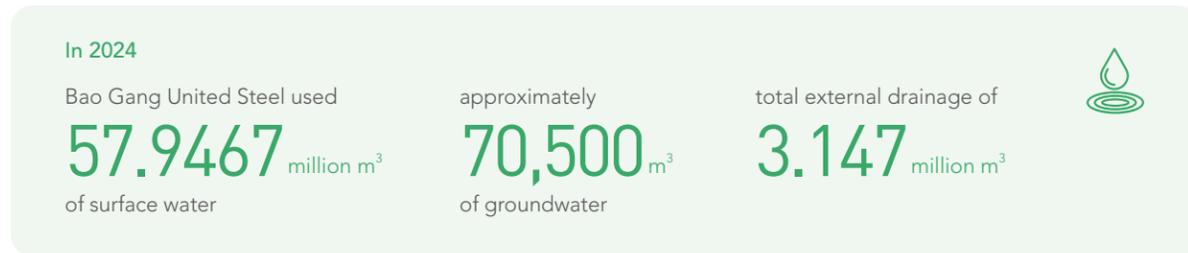
Bao Gang United Steel established a Water Resource Management Committee, with the Party Secretary and Chairman serving as directors, Bao Gang United Steel leaders serving as deputy directors, and relevant functional departments and organization leaders, including the Executive Deputy Director of the Low-Carbon Energy Center, serving as members; the office is located in the Low-Carbon Energy Center, with the Executive Deputy Director serving as the office director and the Head of Power Operation Management Department serving as the deputy office director.

#### • Strategies

Risks	Measures
Unauthorized water extraction or water extraction not in accordance with the approved water extraction permit conditions	New, modified, and expanded projects must apply for water extraction permits as required, and the approved water sources and purposes must not be arbitrarily changed.
Organizations with water intake exceeding the specified scale have not installed online metering facilities, or the online metering facilities are unqualified or not operating normally.	Conduct instrument inspections for existing and new/renovated/expanded projects to meet the requirements of <i>GB/T 24789-2022 General Rules for Equipping and Managing of the Water Measuring Instrument in Water-Use Organization</i> .
Water-use organizations exceeding mandatory water quotas have not implemented water-saving technological transformations within the specified period.	Prioritize the use of unconventional water and cascade water use, strengthen monitoring of water quantity and quality at each usage stage, enhance cascade and recycled water use, and carry out water-saving renovations for water facilities.

### • Impact, risk, and opportunity management

Bao Gang United Steel strictly adheres to the *Yellow River Protection Law of the People's Republic of China, Regulations on Water Conservation, and Management Measures for Water Resource of Baogang Group*, and issued the *Notice on the Establishment of the Water Resource Management Committee of Inner Mongolia Bao Gang United Steel Co., Ltd.*; enhance water-saving awareness, conduct technological transformations, and comprehensively improve the level of intensive and efficient water resource utilization. In 2024, Bao Gang United Steel used 57.9467 million m<sup>3</sup> of surface water and approximately 70,500 m<sup>3</sup> of groundwater, with total external drainage of 3.147 million m<sup>3</sup>, achieving the best historical level of new water consumption per ton of steel.



★ Case: The first comprehensive treatment equipment for circulating cooling water in the national steel industry was put into use at Bao Gang United Steel

On March 26, 2024, the first comprehensive treatment equipment for circulating cooling water in the national steel industry began trial operation at Bao Gang United Steel, expected to achieve "near-zero emission", reducing external drainage by 100 m<sup>3</sup> per hour and saving 760,000 m<sup>3</sup> of new water annually.



Comprehensive Treatment Equipment for Circulating Cooling Water

### • Indicators and goals

Indicator	Unit	2024
Total water consumption	Ten thousand m <sup>3</sup>	285,034.53
Total water consumption per million revenue	Ten thousand m <sup>3</sup>	4.1862
Fresh water consumption	Ten thousand m <sup>3</sup>	5,801.73
Fresh water consumption per ton of steel	Ten thousand m <sup>3</sup>	3.87
Recycled water consumption	Ten thousand t	279,232.80
Water resource reuse rate	%	97.96
Waste water emission	Ten thousand t	314.72

### Pollutant emission management

In accordance with the *Emission Standard of Air Pollutants for Steel Smelt Industry and Emission Standard of Air Pollutants for Steel Rolling Industry*, Bao Gang United Steel releases the *Regulations on the Administration of Pollutant Discharge Permits* for "one-permit" management of pollutant discharge permits and strict control of pollutant emissions. It strengthens the construction of automatic monitoring facilities for pollutant emissions, networks with ecological environment and relevant departments, and formulates self-monitoring plans, to reduce the impact of pollutant emissions on surrounding communities. In 2024, emissions of sulfur dioxide, nitrogen oxides, and particulate matter decreased by 33%, 22%, and 27% respectively compared to 2023, setting a new historical low for major air pollutant emissions. This makes the Company become the first steel enterprise in Inner Mongolia Autonomous Region to complete the publicity of ultra-low emissions for all processes and the first steel enterprise with A-level performance in heavy pollution weather.



"Triple-effect Evaporation" Equipment for Sintering Desulfurization Wastewater at Rare Earth Steel Ironmaking Plant

### Waste disposal

Bao Gang United Steel attaches great importance to waste management, strengthens waste classification and recycling, and promotes harmless waste treatment, to reduce resource waste and minimize adverse environmental impacts.

### • Governance and strategy

Bao Gang United Steel establishes an Environmental Protection Committee to manage waste-related treatment work. The Environmental Protection Committee of each organization is responsible for identifying and evaluating risks and opportunities of the organization every six months; the Company's environmental risk and opportunity identification and evaluation team is responsible for analyzing, reviewing, and determining the company-level risk and opportunity control list, and formulating response measures for the risk events included in the risk and opportunity control list based on the actual situation.

Risks	Measures
Unclear and unreasonable waste control methods	<ul style="list-style-type: none"> <li>Implement clean production audits for emission reduction from the source;</li> <li>Strictly select pollution control technologies;</li> <li>Establish registers to track waste cycles;</li> <li>Strengthen related party management and standardize third-party disposal.</li> </ul>
Waste out of control	<ul style="list-style-type: none"> <li>Develop waste management procedure documents;</li> <li>Clarify processes and responsibilities;</li> <li>Set up temporary storage areas and manage them compliantly;</li> <li>Establish monitoring and inspection systems;</li> <li>Formulate emergency plan and organize drill.</li> </ul>

### • Impact, risk, and opportunity management

In strict accordance with the requirements of the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste*, *Management Measures for Hazardous Articles of Baogang Group*, *Management Measures for Solid Waste Pollution Prevention and Control of Baogang Group*, and other documents, Bao Gang United Steel continuously optimizes solid waste disposal processes to strive to achieve a win-win situation for economic and ecological benefits.

#### Waste disposal measures



- Establish a direct sales system for water granulated slag with surrounding cement plants to expand external sales channels for solid waste products
- Optimize solid waste processing methods to make solid waste products more marketable and of higher added value
- Explore new ways of solid waste utilization, investigate deep utilization projects for desulfurization gypsum, and reduce solid waste disposal costs



Disposal and Transportation of Waste Oil Drums at Ironmaking Plant

### • Indicators and goals

#### Waste emission indicators

Indicator	Unit	2024
Total waste generation	Ten thousand t	1,323.69
General waste generation	Ten thousand t	1,300.90
Total non-harmful waste generated per million revenue	t	191.06
Total hazardous wastes	Ten thousand t	22.79
Total harmful waste generated per million revenue	t	3.347
General waste recycling volume	Ten thousand t	959.13
Total waste recycled per million revenue	t	140.86
Proportion of recycled waste	%	72.4

#### Waste emission goals

By 2025, the Company's comprehensive utilization rate of bulk solid waste will reach 97% (excluding tailings), with 100% compliant disposal and storage of desulfurization gypsum, fly ash, and tailings, and a 100% safe disposal rate for hazardous waste.

By 2024

the Company's comprehensive utilization rate of bulk solid waste will reach **97%** (excluding tailings)

with **100%** compliant disposal and storage of desulfurization gypsum, fly ash, and tailings

a **100%** safe disposal rate for hazardous waste



## Protect ecological balance

Bao Gang United Steel insists on taking a new path of high-quality development guided by ecological priority and green development to integrate green concept into every detail of daily work, and is committed to building a modern steel production base that is green, efficient, and sustainable.

### Practice of green business concept

By integrating green concept into office processes, Bao Gang United Steel guides employees to practice savings and green office to maximize resource savings, reduce energy consumption, decrease waste emissions, build a "conservation, efficiency, environmental protection, hygiene, and health" office environment, and unit all employees in the consensus of green development.



Sign for Turning Off Lights When Leaving at Rare Earth Steel Ironmaking Plant

### Build a green factory

Bao Gang United Steel insists on building green ecological steel plants, vigorously promotes the coordinated prevention and control of air, water, and soil, actively advances greening and beautification of the plant area, and gradually becomes a new green factory with woods, scenery, and greenery within the plant. In 2024, Bao Gang United Steel achieved a 50.1% green coverage rate in plant area was, and was awarded the title of an autonomous-region-level green factory.

In 2024

Bao Gang United Steel achieved a

**50.1%**

green coverage rate in plant area was

was awarded the title of

**an autonomous-region-level green factory**



Chimney Lighting Conducted by Special Steel Branch



Greening Project of Roads in the Renovated Steelmaking Plant

### Focus on biodiversity

Bao Gang United Steel regards the construction of green mines as an important measure to promote high-quality development and ecological civilization in mines and ensure that ecological environment management in mines is implemented effectively. By strictly upholding the bottom line for ecological protection, it is committed to ecological restoration and governance to protect biodiversity. Currently, the regional ecological environment has significantly improved, with various animals such as white cranes, wild ducks, fish, and hares inhabiting and thriving in the alluvial beaches and wetlands of the tailings pond area, which greatly enriches biodiversity and promotes the formation of a virtuous cycle ecological chain.



Case: Barun Mining Branch promotes green mine construction

Based on the actual ecological environment of the mine, Barun Mining Branch sets clear green ecological restoration goals. A mixture of various shrubs and grasses such as caragana, amorpha and alfalfa were planted to explore a new model suitable for vegetation restoration in cold and arid regions. The No. II-2 dolomite dump, No. III-1 rare earth dump, No. III-2 dolomite dump, No. III-3 waste rock dump and the southwest dump were treated through slope cutting and shaping, vegetation restoration, and pavement and sprinkling, which presented a new scene with green mountains, birds' twitter and fragrance of flowers.



Scenery of Mine after Treatment



# Society

## Build dreams and benefit the people

Building the foundation of symbiosis with a human centered approach. Bao Gang United Steel deeply cultivates the concept of "symbiosis and mutual benefit", integrates humanistic care into the core of corporate governance, and builds an ecological network of collaborative development among multiple stakeholders. In the dimension of value co-creation, the Company drives product and service upgrades through digital transformation, and provides customers with excellent quality. At the level of employee development, the Company adheres to the principles of "equality, diversity, and inclusiveness", improves the mechanism for safeguarding rights and interests, builds a platform for career growth, and activates the innovative potential of human capital. In the field of partner collaboration, the Company adheres to the principle of integrity management, builds the foundation for sustainable development of the industry together with partners, deeply integrates itself into the construction of social livelihood, continuously releases the efficiency of industry's feedback to society, and paints a picture of common prosperity with responsibility.

Key performance

**No major**  
work safety accidents occurred throughout the year

The Company invested  
RMB **12** million in employee  
training throughout the year

completed  
**2,203**  
training projects

achieved  
**100%**  
employee training coverage

The number of suppliers  
for the whole year was  
**1,632**

the purchase orders on the  
bidding and procurement  
platform accounted for  
**100%**

A total of  
**467**  
volunteer services  
were carried out  
throughout the year  
with a total of  
**13,780**  
participants



# 02 SOCIETY

## Customer orientation, quality first

Bao Gang United Steel always puts customers first. It builds a strict quality control system for strict quality control, and ensures product quality with high standards; continuously optimizes service processes for efficient and considerate services, and promptly collects and processes customer opinions and suggestions for effective improvement of customer satisfaction.

### Product quality assurance

Adhering to the quality management policy of "strengthening risk awareness, stabilizing production process, intensifying quality management, implementing brand building, and continuously improving customer satisfaction and loyalty with Bao Gang United Steel's high-quality development strategy as guide and customer needs as driving force", Bao Gang United Steel ensures that its product quality meets or exceeds industry standards and meets the diverse needs of customers.

#### • Governance

The Company's quality management system organization is mainly composed of management, functional management departments (mainly including manufacturing and quality, equipment, human resources, finance, etc.), product production departments, support departments (marketing, R&D, chemical testing, measurement, warehousing, etc.), with relevant responsibilities and authorities clearly defined.

#### • Strategies

The Company formulates the management document *Control Procedure for Risk and Opportunity Management and Preventive Measures* to manage product quality risks through processes such as product quality risk identification, product quality risk assessment, and risk prioritization.

Risks	Measures
Promotion of cold-rolled automobile steel faces challenges	Efforts are made in customer service, product development, and process stability to improve the quality stability of automobile shell plates.

Opportunities	Risks
"Belt and Road" policy	As a strategic product of the Company, the Company accelerates overseas product certification for heavy rail steel and expands its usage in high-speed rail projects in countries such as Russia, India, and Latin America.
"Carbon peaking and carbon neutrality" Initiative	As a branded product of the Company, the Company leverages resource advantages, regional advantages, and quality advantages to expand its market share in wind power steel.
Development of gas pipeline industry	Increase the sales of high-grade, high-value-added pipeline pipes and pipeline steel products, and enhance the product structure level.
Development of western PV industry and new energy industry	Further expand the production capacity of zinc-aluminum-magnesium products, vigorously promote the development of medium- and high-grade non-oriented silicon steel, and improve product market share and competitiveness.

### • Impact, risk, and opportunity management

#### Quality management

The Company revises and formulates 15 quality management systems, including the *Management Measures for Quality Accidents of Bao Gang United Steel* and *Catalog of Conventional Steel Products of Bao Gang United Steel in 2024*, to further improve the full-process quality management of the steel rolling system. It regularly carries out special inspections of "dedicated personnel for specific tasks at fixed cycles and hot spots" and "process quality and quality objection rectification" to promote the rectification of issues from four dimensions of "immediate action and rectification, drawing inferences about other cases from one instance, establishing rules and regulations, and closed-loop management" and enhance process quality control capabilities. It strictly implement the control standards for harmful substances, optimize the management process and evaluation details of quality traceability, strictly control the management of harmful elements in self-produced iron concentrate, and further improve product safety and quality. It benchmarks against industry leaders, establishes benchmarking improvement indicators, and promotes the "dual improvement" of product quality and operational efficiency.

By the end of 2024, Bao Gang United Steel has passed the ISO 9001 Quality Management System and IATF 16949 Automotive Quality Management System certifications; obtained the extended production license for deformed steel bar products, CRCC extended certificate for rail products, EU TSI renewal certificate for rail products, GOST renewal certificates for H-shaped steel and seamless pipe products in Russia and Kazakhstan, renewal certificates for shipbuilding steel pipes, plates, coils, and H-shaped steel from the China Classification Society, renewal certificate for shipbuilding steel plates from the American Bureau of Shipping, and annual supervision certificate for weathering resistant structural steel from the China Classification Society; completed the KRRI product type certification and system on-site audit for rails by the Korean Ministry of Transport and CRCC annual supervision audit for rails.

#### Quality management achievements of Bao Gang United Steel in 2024



- 3 achievements were selected as excellent cases of **increasing variety, improving quality and creating brands** by the China Iron and Steel Association;
- The Company's 11 products, including hot-rolled low-alloy structural steel strips, hot-rolled low-alloy structural steel plates, and seamless steel pipes for low- and medium-pressure boilers, were rated as **"Golden Cup Quality Products"** by the China Iron and Steel Association. Among them, one rail steel product for railway applications was rated as **"Golden Cup Special Quality Product"**;
- The Company was selected as **"2024 China Excellent Steel Enterprise Brand"** and rated as a **benchmarking enterprise for brand building in Inner Mongolia**.

#### Quality culture

The Company continues to implement the "Quality Month" activities and conducts systematic quality management knowledge training to improve the participation of all employees in quality management. In 2024, the Company organized and carried out the annual "quality first" special quality training, QC team activities, and Six Sigma project training, and participated in the 2024 QC Team Academic Exchange Meeting of the Inner Mongolia Autonomous Region to strengthen the quality management level of employees.

#### "Quality Month" activity



Strip Plant is Carrying out Filter Cleaning, Repair and Replacement Work



Steelmaking Plant is Conducting "Quality Month" Special Training

• Indicators and goals

In 2024, the actual qualification rate of the Company's key products reached 99.06%. The Company's waste and ungraded product reduction rate was 1.17%, a decrease of 0.43 percentage points year-on-year, achieving the set goal.

By 2025, the Company's waste and ungraded product reduction rate will be 1.12%. To ensure that this goal is achieved, the Company has taken measures such as refining quality defect prevention measures, strengthening process control, and tackling difficult quality issues, and has continued to carry out research on reducing waste and ungraded products.

Optimization of customer service

Adhering to the customer service concept of "meeting customer needs, serving the market, and achieving win-win results", Bao Gang United Steel formulates the *Management Measures for Steel Products and Services of Bao Gang United Steel*, establishes a three-dimensional service model integrating "production, sales, research and application", continuously optimizes the service system, actively provides value-added services, to create a closer and more integrated development community with customers.

• Improve service ability

With marketing, R&D and manufacturing experts as the core, the Company strengthens the benchmarking and efficient collaboration of products, technologies and capabilities, and continues to establish a "customer-centric" service model. It forms a technical innovation path of joint R&D and results sharing with users, and helps users develop synchronously in the application of new materials with high-quality products and services.

• Proactively respond to complaints

The Company implements the customer management system *Management Measures for Handling of Product Objections and Customer Quality Complaints of Bao Gang United Steel*, and gradually forms a relatively complete quality credit standard system. It establishes the "Bao Gang United Steel E-commerce" WeChat mini-program, a customer feedback channel, to quickly respond to and handle customer complaints and grievances, and applies the 8D reporting method to implement rectification and solidify effective measures, which provides support for reducing losses arising from quality objections. In 2024, Bao Gang United Steel handled a total of 58 quality objections throughout the year, with a comprehensive customer satisfaction rate of 97.17%.



• Protect customer privacy

The Company strengthens customer information management, strictly complies with information security regulations such as the *Data Security Law of the People's Republic of China*, *Personal Information Protection Law of the People's Republic of China*, and *Regulations of the People's Republic of China for Safety Protection of Computer Information Systems*, and establishes a management system for customer information and privacy protection to effectively ensure customer information security and transaction security. During the reporting period, no customer information leakage incidents occurred.



Employee development

With the protection of employees' rights and interests as the cornerstone,, Bao Gang United Steel carefully balances employees' work and life, continuously improves the talent cultivation and promotion system, fully focuses on employees' occupational health and safety, and provides solid growth guarantees and abundant development opportunities for employees.

Care for employee growth

• Governance

The overall employee management strategy of Bao Gang United Steel is decided by the Board of Directors and specifically executed by the management. The Company has established a Nomination, Remuneration, Assessment Committee, with functional departments such as the General Affairs Department, HR and Organization Department, and Planning Department responsible for managing various affairs such as remuneration and benefits, labor rights and interests, employee training and post promotion, and all employees being covered step by step.

• Strategies

Risk points	Risk level (ABC)	Prevention and control measures
Irregular handling of personnel transfer	Level B	Approve employee transfers in strict accordance with the transfer principles and human resource efficiency improvement indicators.
Irregular handling of labor contract signing and termination procedures	Level B	Handle in strict accordance with regulations and approval procedures.

• Impact, risk, and opportunity management

Adhering to equal employment

Bao Gang United Steel comprehensively implements the requirements of the *Labor Law of the People's Republic of China* and *Provisions on Prohibiting the Use of Child Labor*, to effectively safeguard the legitimate rights and interests of employees. Fair treatment is given to employees of different genders, ages, educational backgrounds, ethnicities, religious beliefs, and cultural backgrounds. Any form of employment discrimination and workplace harassment is opposed. The use of child labor and forced labor is prohibited. Employees' personal privacy is protected. During the reporting period, the Company did not experience any incidents of child labor, forced labor, human trafficking, discrimination, or harassment.

Improvement of remuneration and welfare

Bao Gang United Steel continues to strengthen the construction of its remuneration and benefits system. It pays the five social insurances and one housing fund, as well as enterprise annuities legally and timely, and provides employees with competitive working conditions and remuneration and benefits. It also implements the supplementary medical insurance and supplementary pension insurance systems in accordance with the relevant requirements of the Corporation to offer comprehensive protection for employees.

### Salary distribution management method



- Bias towards key positions, high-level technical and skilled talents, and frontline operation positions;
- Optimize the salary structure, determine the fixed-to-floating ratio of remuneration based on the different characteristics of positions;
- Establish a distribution orientation where leading cadres have "low subsistence allowances, high incentives, and unstable income", frontline employees have "basic salary, incentives, and relatively stable income", and high-level talents and researchers have "high subsistence allowances, strong incentives, and competitive income".

### Strengthen democratic management

Bao Gang United Steel insists on improving the collective consultation-based mechanism for joint decision-making. Walkaround inspections by Workers' Congress and employee representatives are conducted to effectively listen to employee representatives' suggestions for enterprise development. Bao Gang United Steel insists on enterprise affairs transparency. The Company's official website and WeChat are used to disclose important matters related to employees and enterprise development to effectively safeguard employees' rights to know, participate, express, and supervise. In 2024, all proposals from the Workers' Congress were tracked and processed throughout the process, with a 100% response rate, and the proportion of active employees among labor union members reached 100%.

In 2024

with a **100%** response rate

the proportion of active employees among labor union members reached **100%**



The Second Session of the Second Workers' Congress of Bao Gang United Steel

### Promote talent development

In line with the talent planning and deployment of Baogang Group, Bao Gang United Steel constructs a comprehensive talent introduction, cultivation, and utilization system with enhancing the talent competitiveness and market competitiveness of Bao Gang United Steel as the core, optimizing the talent development ecosystem as the main line, deepening the reform of talent systems and mechanisms as the driving force, and building a high-level talent team as the key point. It respects, trusts and encourages talents and helps them success, and continuously strengthens and improves its talent work.

#### • Talent introduction

The Company implements the national decisions and deployments to stabilize and ensure employment. In 2024, it recruited 690 new employees through campus recruitment, social recruitment, order-based classes, veteran resettlement, and introduction of mature talents. Among them, there were 2 doctoral students and 29 postgraduate students. The Company encourages subordinate companies to independently "seek talents", quickly introduce "high-end talents", vie for "urgently-needed talents", and recruit "mature talents". In 2024, it conducted on-site engineer training for undergraduates from universities in the autonomous region for the first time, and innovated the "3+0.5+0.5" order-based training model and multi-level internship subsidy incentive mechanism. It undertakes and organizes internship and practical activities for 400 students from Tsinghua University, University of Science and Technology Beijing, Northeastern University, Inner Mongolia University of Science and Technology, etc., which further promotes school-locality and school-enterprise cooperation and exchanges.

In 2024

response rate **690** new employees through campus recruitment, social recruitment, order-based classes, veteran resettlement, and introduction of mature talents. Among them

there were **2** doctoral students

**29** postgraduate students

#### • Talent promotion

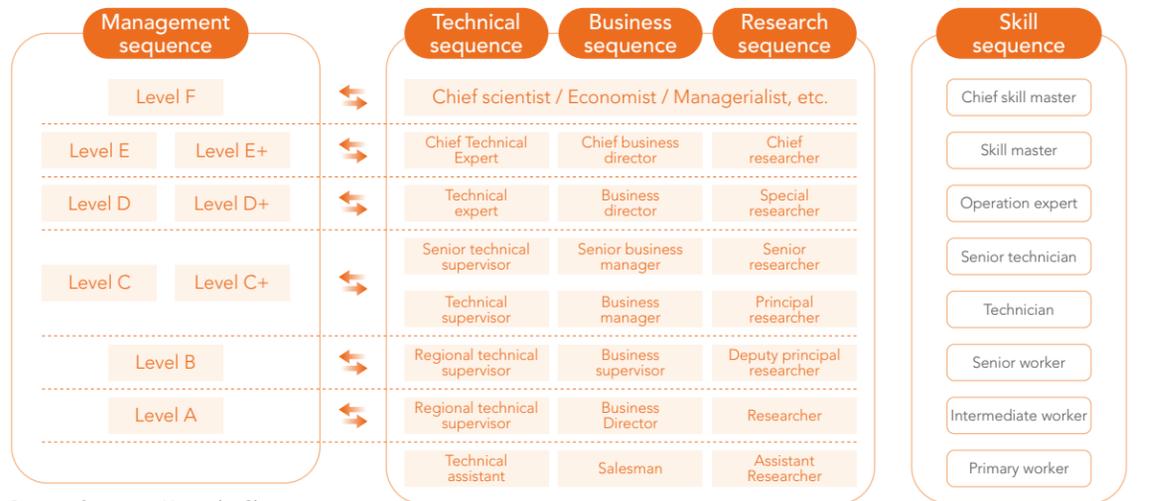
According to the *Management Measures for Management Positions and Cadre Hierarchy System of Baogang Group (Edition 2024)* and other relevant regulations of the Corporation, the Company clarifies the job qualification conditions, standardizes the selection and appointment procedures, and improves the training mechanism for level A-F managers. At the same time, it carries out reforms and innovations in the technical and business sequence team, and forms a talent development channel with vertical promotion stages and horizontal integration bridges.

In 2024, the Company established a "dual-track" cadre management system based on dynamic grade determination by departments, with position management and performance management as the core, and gradual accumulation and improvement of job levels and personnel levels. It promoted the reform of the management sequence, formulated and verified the managers' integral register, and applied it to the determination of personnel levels, grades, and job levels. The reform of management positions and cadre hierarchy system basically achieved a smooth transition.



Case: Bao Gang United Steel improves product quality and quantity improvement by establishing technical and business sequence

Bao Gang United Steel attaches importance to the construction of its talent team. In order to broaden the channels for talent growth, strengthen the construction of talent echelons, and stimulate the entrepreneurial vitality of employees, the Company has comprehensively promoted the reform of its technical and business sequence, and built a development channel consisting of three sub sequences: technical sequence, business sequence, and research sequence, totaling seven levels. According to the reform concept of "refined management and strong technical business", in 2024 the proportion of technical positions in Bao Gang United Steel increased from 14% to 17%, the proportion of business positions increased from 5.56% to 6.5%, the proportion of research positions increased from 0.31% to 0.43%, The total proportion of technical and business sequence positions increased from 19.87% to 23.93%. The strict management of talents at levels seven to five has highlighted the subjectivity, importance, authority, comprehensiveness, leadership, and foresight of high-end talents in various professional fields, the on-demand cultivation of talents at levels four to three has strengthened the role of technical talents in various professional fields, and the priority development of talents at levels two to one has consolidated the talent foundation, which helps the formation of a "pyramid" job position with a reasonable structure, scientific echelon, and professional coverage, and injects continuous talent vitality into the Company.

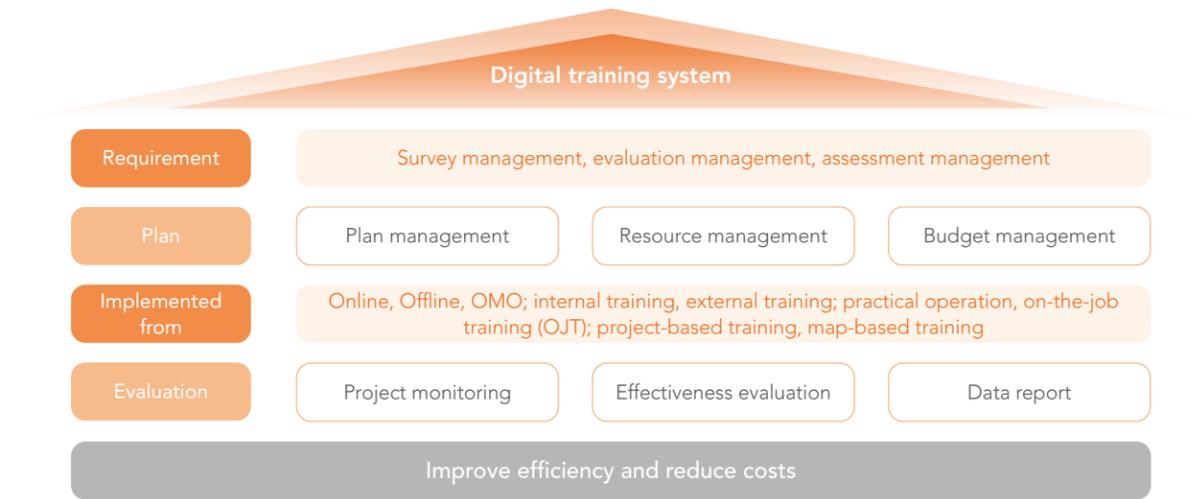


Position Sequence Hierarchy Chart

Talent training

The Company adopts a training organization and operation model that involves tiered management and responsibility by organizations, and active employee participation. This model comprehensively enhances training quality and efficiency from multiple dimensions, innovates training methods, and improves the quality of training work. In 2024, the Company continued to promote the expansion of training work towards digital, platform-based, and cloud-based training models. It invested RMB 12 million in vocational education funds, completed 2,203 training projects, with 278,000 participants and a training coverage rate of 100%. A "7+3+N" labor competition structure was gradually formed, with a competition participation rate of 100%.

In 2024  
It invested RMB **12** million  
in vocational education funds  
completed **2,203** training projects  
with **278,000** participants  
a training coverage rate of **100%**



- Strengthen manager training** - Conduct training classes for managers in various fields such as safety, production, equipment, comprehensive management, and compliance to enhance their capabilities and qualities, and improve the overall quality of the cadre team.
- Strengthen training of professional technical backbones** - Scientifically plan and implement training programs for technical and business personnel, and enhance their abilities in technological innovation, transformation of scientific and technological achievements, and solving practical production problems.
- Strengthen training of skilled operators** - All organizations and workshops conduct comprehensive job skill training; prepare for national and industry-level vocational skill competitions such as the "Shagang Cup" and "Magang Mining Cup"; participate in training classes for team leaders in steel enterprises to improve practical management skills, and international welding engineer research programs.



Opening Meeting of Theory Exam of Vocational Skills Competition of Bao Gang United Steel in 2024



Bao Gang United Steel Holds the 2024 Vocational Skills Competition for Continuous Casting Workers

### Enrich employee life

Bao Gang United Steel deepens the care service system with clear levels, different focuses, and organic connections, which covers hardship assistance, warm condolences, life services, and protection of women's rights and interests. Through activities such as spring condolences, "Summer Coolness" care, and autumn scholarship programs, employees feel the warmth of the corporate family. At the same time, the Company focuses on enriching employees' cultural and sports life, encourages employees to actively participate in various cultural performances, and organizes chess and air volleyball competitions at Bao Gang United Steel, to create a healthy and positive company culture.



Ironmaking Plant Carries Out the 2024 "Autumn Scholarship for Excellence in Education" Activity



Labor Union of Bao Gang United Steel Purchases Drinking Water Purifiers for Mining Units



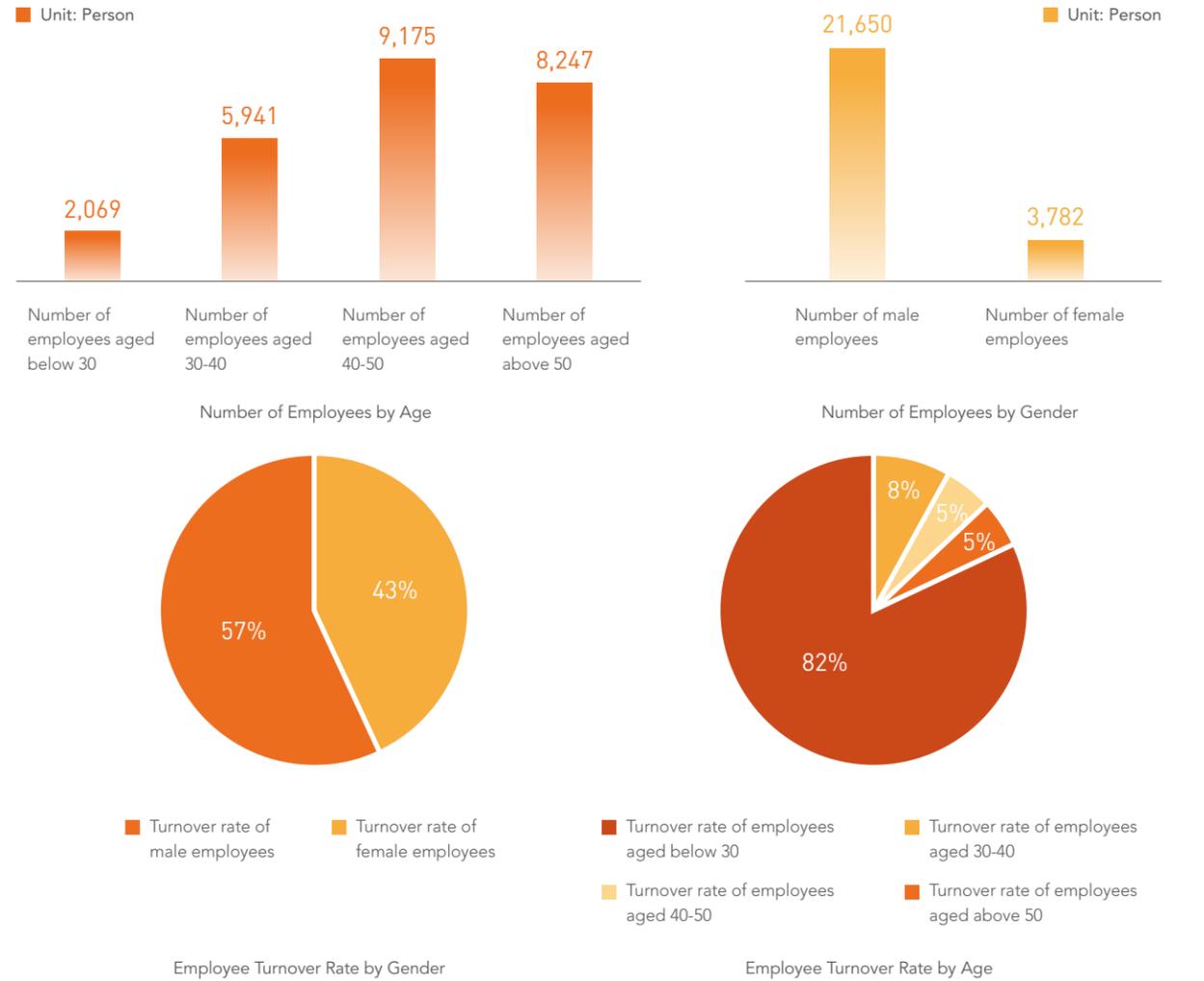
Bao Gang United Steel's First Employee Chess (Chinese Chess, Go, Checkers) Competition



Bao Gang United Steel Holds the Fourth Employee Air Volleyball Competition

### Indicators and goals

Indicator	Unit	2024
Total number of employees	Person	25,432
Turnover rate of employees	%	0.35
Labour contract signing rate	%	100
Social insurance coverage rate	%	100
Investment in employee training	RMB ten thousand	1,200
Per capita duration of employee training	Hour	225
Employee training coverage rate	%	100



### Ensure safety and health

Bao Gang United Steel is committed to building a comprehensive occupational health and safety management system, comprehensively promoting a dual prevention mechanism, continuously improving the level of information-based work safety, striving to create a safety culture battlefield, and creating a safe and healthy working environment for employees. In 2024, Bao Gang United Steel invested RMB 203 million in work safety and achieved zero work safety accidents.

### Governance

Bao Gang United Steel establishes a Work Safety Committee and an Occupational Disease Prevention Committee, sets up a specialized safety management body (Safety Management Department), appoints a safety director and full-time work safety managers, develops the *All-staff Work Safety Responsibility System* and *All-staff Work Safety Responsibility List of Bao Gang United Steel*, conducts annual evaluation of the implementation of the all-staff work safety responsibility system, regularly organizes meetings of the Work Safety Committee and safety work meetings to study and deploy work safety production, and organizes and carries out special safety inspections to effectively build a solid defense line for enterprise work safety production.

• Strategies

Bao Gang United Steel has thoroughly carried out safety risk control activities, comprehensively identified potential safety hazards, and scientifically formulated management measures with the aim of achieving intrinsic safety. The Company's major risks are primarily concentrated in production processes across industries such as non-coal mining, metal smelting, metal rolling, and metallurgical trading. The prominent risks and control measures are as follows:

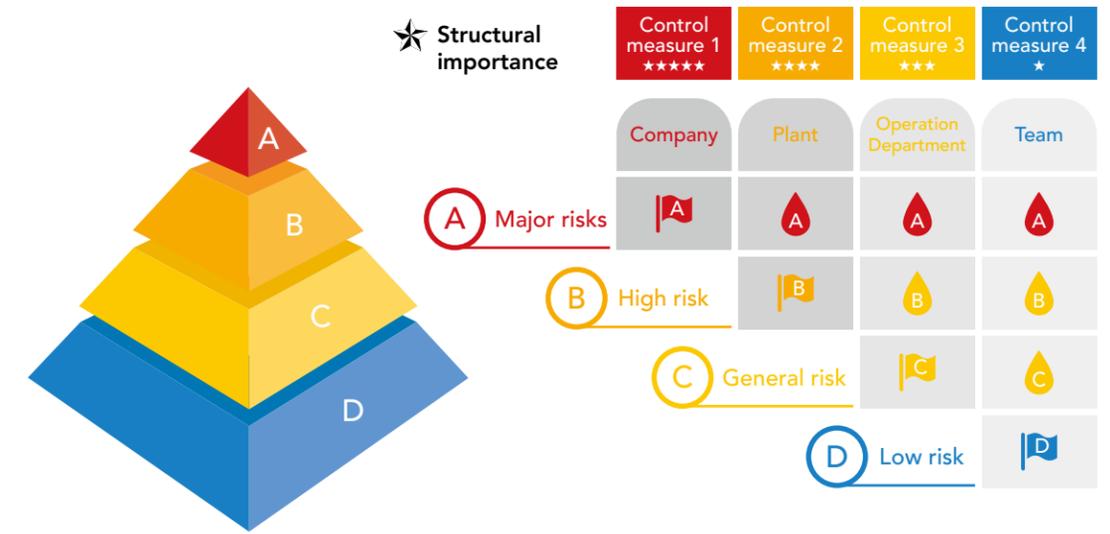
Industry category	Risk point	Existing risks	Control measures
Non-coal mine	Slope	Collapse	Use pre-splitting controlled blasting technology for near slope blasting; conduct all-weather radar monitoring and no less than three manual inspections per week for slopes, with slope cutting and unloading if necessary; drill drainage holes in water-seeping slopes for drainage; conduct acceptance according to pre-splitting near slope blasting standards.
Metal smelting	Converter smelting Gas holder	Other explosions, object strikes, burns, fires, vehicle injuries	Keep areas for molten metal smelting and transportation (lifting) dry; ensure the proper functioning of safety monitoring, control, interlock, and firefighting equipment; provide labor protection equipment and emergency supplies that meet national and industry standards.
Metal rolling	Roll disassembly and assembly operations	Object strikes, mechanical injuries, lifting injuries, other injuries	Inspect tools before operations to ensure they are intact; strictly follow safety operating procedures during disassembly and assembly; provide labor protection equipment and emergency supplies that meet national and industry standards.
Metallurgical industry and trade	Infrastructure maintenance and repair work	Object strike Fall from height Mechanical injury	Strictly follow safety operating procedures; ensure that special operation personnel work with certificates; ensure the proper functioning of equipment interlocks and protective devices.

• Impact, risk, and opportunity management

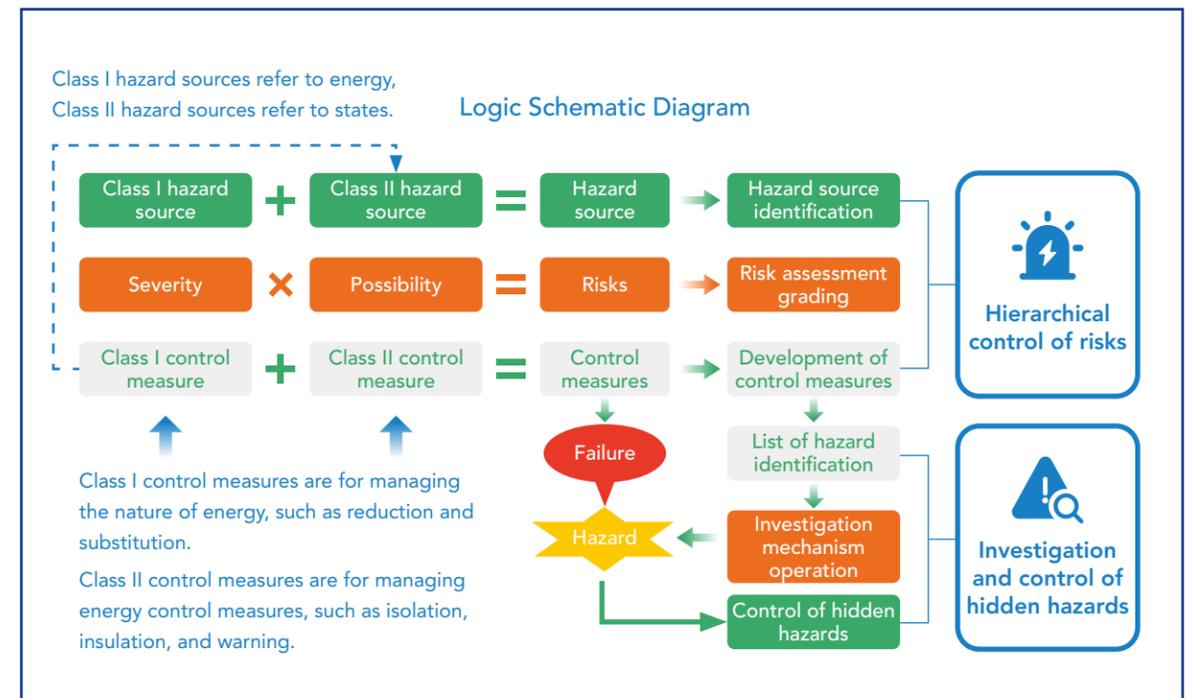
Bao Gang United Steel streamlines and improves its safety management system, and formulates the *Management Measures for Work Safety Standardization of Bao Gang United Steel* and *Management Measures for Hazardous Operations of Bao Gang United Steel* which clarify the management responsibilities, requirements, creation standards, and assessment details for work safety standardization. It formulates the *Three-Year Action Plan for Work Safety Improvement of Bao Gang United Steel (2024-2026)* and advances the three-year action plan for work safety improvement, to ensure the stable and smooth work safety throughout the year. In 2024, the Company passed the GB/T45001:2020/ISO45001:2018 Occupational Health Management System re-certification and obtained the certificate.

Promote dual-prevention mechanism

To further implement the main responsibility of Bao Gang United Steel for work safety, carry out in-depth hierarchical safety risk control and safety hazard investigation and governance work, the Company compiles the *Guidance Manual for Hierarchical Control of Work Safety Risks and Hazard Management* for identifying and controlling risks from the source, and scientifically and promptly investigating and managing safety hazards, revises and files the *Comprehensive Emergency Plan for Work Safety Accidents of Bao Gang United Steel*, issues the *Learning Manual for Major Accident Hazard Judgment Standards*, organizes special studies on "interpretation of major accident hazard judgment standards" and online special exams on major accident hazard judgment standards and other activities, and carries out activities such as "one special inspection per month", to ensure that all potential safety hazards in the Company are dynamically eliminated.



Risk Level Diagram



Dual-prevention mechanism work flow

### Promote safety informatization

To further enhance the level of information management in work safety work, Bao Gang United Steel has developed and constructed its own safety information system, which includes 21 modules such as risk management, hidden danger investigation, education and training, and supervision and inspection, to achieve online control of safety processes and improve safety management efficiency. The Company has actively promoted the construction of its own work safety risk monitoring and early warning system, and becomes a pilot unit for the construction of work safety risk monitoring and early warning system in iron and steel enterprises in China. The Company has comprehensively promoted the mechanization of "replacement of personnel with robots, reduction of personnel through automation, and intelligent unmanned operation", achieving the replacement of personnel engaging in repetitive high-intensity work with robots and improving the level of essential safety.

### Safety culture development

Safety culture is an important component of enterprise safety culture construction. To enhance employees' safety awareness and skills, and ensure the stable operation of the Company's work safety, the Company establishes 21 safety culture sites to showcase the achievements of safety culture construction, utilizes display boards, electronic promotional screens, WeChat, and other media to comprehensively promote safety culture, carries out activities such as "Safety Cup", "Safety Activity Month", and "Safety Warning Month" to strengthen employees' confidence in work safety, and organizes safety lectures and special safety training to enhance the safety literacy of employees.



Safety Knowledge Contest



Safety Publicity and Consultation Day Activity

### Guarantee of occupational health and safety

The Company deeply implements the "reassurance project", expands "1 center + 4 stations" medical services, and actively holds various mental health lectures on topics like psychological health and parent-child relationships. An institution was entrusted to test 3,988 occupational hazard factor points at Bao Gang United Steel, with a 97.1% compliance rate, and to test sealed source instruments and radiation devices with radioactive occupational hazard factors, with a 100% compliance rate. In 2024, Bao Gang United Steel experienced no new occupational diseases and the incidence rate of occupational diseases was zero.



Bao Gang United Steel and Baogang Hospital's Clinic in front of Factory Collaborate to Conduct a Free Clinic Activity



Coal Coking Chemical Branch Holds a Special Training on Psychological Health

### Indicators and goals

Indicator	Unit	2024
Organize safety emergency drills	Times	1,462
Coverage rate of safety risk protection training	%	100
Number of work safety accidents	Nos.	0
Number of employees who died due to work-related injuries	Person	0
Work injury rate	%	0.033
Lost working days due to work-related injuries	Day	806
Number of lostworking days due to work-related injuries per million revenue	Day	0.012
Million-hour injury rate	-	0.17



### Deepen industry cooperation

Adhering to the development concept of "coexistence and co-prosperity" with partners, Bao Gang United Steel deepens cooperation with suppliers, customers, and other stakeholders, actively engages in exchanges with industry associations, peer enterprises, and universities, and jointly seeks industrial development.

### Building a responsible supply chain

Bao Gang United Steel improves the supplier management system, optimizes procurement channels, and continuously enhances the social responsibility level of suppliers based on the principles of fairness, justice, integrity, and quality, the goal of establishing a transparent, efficient, compliant, and continuously competitive procurement management system, and the management experiences learned from advanced steel mills.

### Governance

Bao Gang United Steel establishes a procurement leading team, with the general manager as the team leader, directors, deputy general managers, and assistant general managers as deputy team leaders, and heads of relevant functional departments (units) as team members. The team implements the procurement system of Baogang Group, decides on major matters such as the construction of the procurement management system and the selection of suppliers, takes charge of the supervision of procurement, and studies important matters of internal control, risk management, and supply chain management.

• Strategies

Supply chain disruption risks may have a significant impact on the Company's business. For Bao Gang United Steel, there are mainly supply quality risks and supplier default risks, both of which have short-term impacts on the Company's supply chain safety.

Risks	Measures
Supply quality risk	Guide procurement departments to complete raw material and fuel procurement tasks according to production needs, effectively constrain supplier supply quality, and improve procurement cost performance.
Supplier default risk	Collect performance bonds before contract fulfillment, and deduct penalties according to the agreement when suppliers default; Formulate the <i>Management Measures for Extension of Raw Material and Fuel Procurement Contracts of Bao Gang United Steel</i> , and ensure that production stability and procurement costs fluctuate within controllable ranges.

• Impact, risk, and opportunity management

Strengthen supplier management

The Company conducts supplier eligibility, review, evaluation, and exit work in accordance with internal systems such as the *Management Measures for Material Suppliers of Bao Gang United Steel*, and focuses on building a responsible supply chain.

Supplier eligibility

Supplier eligibility methods include eligibility through public bidding, recommended eligibility, self-recommended eligibility, and temporary eligibility.

Suppliers of different categories submit various qualification materials such as in safety and environmental protection, and are granted access after review. This promotes the active construction of a green supply chain.

A special leading team for the governance of "escaping, emitting, leaking and dripping" issues in the procurement field is established. This promotes the construction clean suppliers.

Supplier review

Suppliers are dynamically managed and reviewed, and are graded according to annual evaluation results into Level A (excellent suppliers), Level B (key suppliers), Level C (qualified suppliers), Level D (temporary suppliers), and Level E (unqualified suppliers).

Supplier evaluation

At the end of each supply year, the Company's relevant departments evaluate suppliers based on subjective and objective indicators such as supply quality, price level, and contract fulfillment.

Stabilize supply chain

• Inventory management

The Company implements the overall deployment strategy of "extreme cost reduction" and "inventory reduction". To ensure stable and orderly production under low inventory, an inventory warning mechanism has been established and implemented, which promotes coordinated transportation between varieties and coordinated fund payments.

★ Case: Coal Coking Chemical Branch achieves relative inventory balance of coking coal through multiple measures

Coal Coking Chemical Branch of Bao Gang United Steel collaborates with the marketing center to adjust supply plans based on real-time inventory, dynamically manage coal storage, ensure balanced coal structure, timely replenishment of single coal inventory, and scientific and reasonable usage ratios. By improving internal production organization and coordination mechanisms, the efficiency of coal unloading by trains and trucks in the coal preparation system is enhanced, and the reserves of single coals in the blended coal are balanced.



Coal Coking Chemical Branch Dynamically Manages Coal Storage

• Procurement management

The Company formulates the "Half Time, Half Task" Work Plan and Measures of Bao Gang United Steel, establishes special task forces for the procurement of ore in the area and in the Inner Mongolia, scrap steel, and alloys. By taking the initiative in procurement and increasing sourcing efforts and expanding supplier resources as goals, it continuously develops new suppliers and new varieties of raw materials, fuels, and auxiliary materials, to enhance the Company's material procurement supply assurance and cost reduction and efficiency improvement capabilities.

• Indicators and goals

Indicator

Indicator	Unit	2024
Number of suppliers	Nos.	1,632
Number of suppliers audited and evaluated annually for corporate social responsibility, environmental, and other ESG-related aspects	Nos.	1,632
Proportion of procurement orders on the bidding and procurement platform	%	100

Goal

Bao Gang United Steel monitors goal progress by establishing an indicator system from five aspects: cost, efficiency, collaboration, risk control, and green development. In the future, the Company will advance supply chain digitalization, enhance intelligence with new technologies; strengthen upstream and downstream collaborative innovation to improve competitiveness; implement green supply chain management, and increase environmental investment to promote sustainable development.

Lead industry standards

Bao Gang United Steel attaches great importance to the construction of industry standardization systems, leverages its advantages in the rare earth steel field, actively participates in the development of international, national, industry, and group standards, and promotes the standardized development of the industry. In 2024, Bao Gang United Steel presided over (or participated in) the formulation and revision of a total of 8 officially released standards, including 1 international standard, 3 national standards, 1 industry standard, and 3 group standards. It also formulated and revised a total of 31 enterprise standards and 26 provisional technical conditions.



Bao Gang United Steel Released the First Set of Group Standard for High-strength Steel Plates for Engineering Machinery in the Steel Industry in China

Promote industry exchanges

Bao Gang United Steel actively cooperates with state-owned enterprises, universities, and other institutions, collaborates with Baowu Carbon and Sinopec for central-local cooperation to promote regional economic synergy, and engages in university-enterprise cooperation with Northeastern University, University of Science and Technology Beijing, and Shanghai University to further enhance the Company's product R&D capabilities. At the same time, efforts are made to expand cooperation fields, which gradually extend from traditional fields to newer and more promising fields, to jointly discuss the bright future of industrial development.



Honorary Certificate of "2024 Outstanding Central-Local Cooperation Case"



Bao Gang United Steel and University of Science and Technology Beijing Held the Launch Ceremony of "Ten Thousand Students Entering Hundred Enterprises, Enterprise Tour of USTB Students" Activity



Strategic Product Seminar Site

Enhance people's well-being

Bao Gang United Steel actively responds to the national rural revitalization strategy, provides strong support for local industrial development through targeted assistance; emphasizes strengthening communication and cooperation with surrounding communities, leverages its professional and resource advantages to carry out charitable activities, and jointly builds a harmonious and symbiotic community environment.

Promoting rural revitalization

Bao Gang United Steel integrates the resource advantages of the assisted regions to continuously promote rural economic development and social progress. In 2024, subordinate companies of Bao Gang United Steel purchased a total of RMB 5.6415 million worth of consumption assistance products through Inner Mongolia Tie Hua Culture Industry Investment CO.,Ltd. and Baogang Group Wankai Industrial Co., Ltd., which effectively helped local farmers increase their income.



Bao Gang United Steel Honored as "2024 Outstanding Listed Company in Rural Revitalization Practices"

## Build a harmonious community

Bao Gang United Steel fulfills its responsibilities as a state-owned enterprise by actively engaging in community development, improving the urban landscape, assisting in the construction of civilized cities, and continuously promoting the construction of a new pattern of urban grassroots governance characterized by joint contribution, collaborative governance, and shared benefits. Over the past year, Bao Gang United Steel's youth volunteer team and youth assault team organized the volunteer service activity of "Celebrating the 70th Anniversary of the Factory's Establishment, Youth Volunteers Show Their Responsibility", mobilized young members to participate in the "Learn from Lei Feng" charity fair. The Company conducted 467 volunteer service activities throughout the year, with 13,780 participants, and several volunteer teams from various organizations including Steel Pipe Branch were awarded the title of Autonomous Region-Level Advanced Collective in Youth Volunteer Service, which significantly enhanced the brand effect and social recognition of youth volunteer services.

In 2024

The Company conducted

**467**

volunteer service activities throughout the year

with

**13,780**

participants



### Case: Bao Gang United Steel honored as "Advanced Organization for Blood Donation in Baotou City"

On November 6, 2024, Bao Gang United Steel was honored as "Advanced Organization for Blood Donation in Baotou City" for its outstanding contributions to ensuring the clinical blood supply and safety in Baotou City at the "Sparkled Red" National Outstanding Blood Donor Story Tour. Its advanced deeds were recorded in the Record of Blood Donation in Baotou City. 6 employees of Bao Gang United Steel were recognized as advanced individuals for blood donation in Baotou City.



Award Ceremony



Volunteer Service Activity of "Youth Contribution, Volunteer First, Strive to Become Lei Feng in the New Era" on Youth League Day



Activity of "Carrying forward the Spirit of Lei Feng and Establishing a Sense of Serving the People" on Youth League Day



Volunteer Service Activity of "Healthy Clinic in the Community"



Volunteer Service Activity of "Celebrating the 70th Anniversary of the Factory's Establishment, Young Volunteers Show Their Responsibility"





# Governance

## Promote stability like a rock

Reform empowers a new situation, and governance upgrades bring a new chapter. Bao Gang United Steel takes Party building as its core engine, deeply roots the spirit of the Third Plenary Session of the 20th CPC Central Committee in its governance structure, and constructs a governance paradigm that deeply integrates Party leadership with modern enterprise systems. Anchored on the goal of modernizing governance capabilities, it improves the risk prevention and compliance system based on the mechanism of "not daring to corrupt, not being able to corrupt, and not wanting to corrupt", and consolidates the foundation of sustainable development. At the same time, it takes technological innovation as its strategic pivot, optimizes the allocation of R&D resources, promotes two-way breakthroughs in technological breakthroughs and transformation of results, activates the "first driving force" for high-quality development, contributes hard-core strength to serving national strategies and industrial upgrading, and demonstrates the benchmark value of state-owned enterprise governance in the new era.

Key performance

The "first issue" was studied **36** studied

the theoretical learning center group of the Party Committee conducted **24** studies

The reform was carried out in **9** categories **48** specific tasks, with the completion rate of key tasks reaching **94%**

There were **no commercial** bribery or corruption incidents

There were **no lawsuits** or major administrative penalties due to unfair competition

The Company owned and participated in the construction of **2** national scientific research platforms **3** provincial platforms **2** academician workstations

The Company developed **67** varieties and nearly **300** grades of new rare earth steel materials.



# 03 GOVERNANCE

## Adhering to the leadership of Party building

Adhering to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, Bao Gang United Steel comprehensively implements the general requirements for Party building in the new era and the Party's organizational line in the new era, continues to play the leading role of Party building by taking forging a strong sense of community for the Chinese nation as the main line, effectively transforms the Party's political and organizational advantages into the Company's innovation and development advantages, and leads and guarantees the Company's high-quality development with high-quality Party building.

### Uphold a firm political stand

Party organizations at all levels of Bao Gang United Steel regard the study and implementation of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as a major political task, deeply understand the significance of the "two establishes", strengthen the "four consciousnesses", stay confident in the "four matters of confidence", and achieve the "two safeguards". They strictly implement the "first issue" learning system, promptly study and convey important speeches, articles, and instructions from General Secretary Xi Jinping, and arrange for their implementation. In 2024, the Company's Party Committee studied the "first issue" 36 times, conducted 24 studies by the theoretical learning center group of the Party Committee, held 7 discussions, and integrated them with actual work deployment, arrangement, and implementation. Meanwhile, they urge grassroots organizations to continuously improve the study quality of the theoretical learning center group, arrange for the inspection and observation of these studies, and achieve full coverage of inspection and observation across all subordinate companies.

In 2024

the Company's Party Committee studied the "first issue"

**36** times

conducted **24** studies

by the theoretical learning center group of the Party Committee

held

**7** discussions



Bao Gang United Steel Arranges for Party-mass Work

## Persistently focus on ideology

Bao Gang United Steel persistently focuses on ideological construction, consolidates development synergy from multiple dimensions such as "idle talk", news publicity, ideology, and national united front against invasion, strengthens ideological foundations, and injects powerful spiritual momentum for high-quality development.

### Deepen "idle talk"

Deepen the working mechanism of "four understandings, five talks, and six visits", build a grid-based responsibility network, solve the urgent and difficult problems of employees with genuine care, and create a harmonious and stable development environment. Bao Gang United Steel was awarded the title of National Excellent Metallurgical Organization in Ideological and Political Work for 2023-2024.

### Strengthen news publicity

Adhering to the concept of "publicity is also productivity, and strong brand is also competitiveness", the Company has built a three-dimensional communication pattern of "traditional media+new media+outdoor media", with daily updates on official social media accounts, more than 1,100 pieces of information pushed annually, and more than 100,000 video views on dedicated channels. The Company has cooperated with Baotou Airport to set up large billboards to display the corporate image in an all-round way and enhance brand influence.

### Focus on ideology

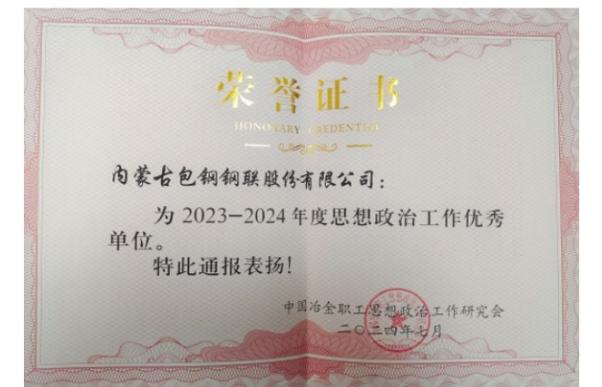
Uphold bottom line thinking, implement ideological work responsibilities, steadily promote the "433" ideological work law, carry out standardized actions on the site, formulate emergency response rules for sudden public opinion, organize ideological special training courses, and ensure the safety and controllability of the ideological field.

### Enhance national united front against invasion

Carry out "one week and two months" activities with high quality, actively promote the "Internet + Ethnic Unity" initiative, regularly conduct the mass education practice activity of "feeling the Party's kindness, listening to the Party's words, and following the Party's path", create an "observable, sensible, and effective" ethnic communication and exchange environment, and allow the awareness of the Chinese national community to be deeply rooted in the hearts of the people.



The Company Organizes Training Class for Improving Ideological Work Capabilities



The Company Was Awarded the Title of National Excellent Metallurgical Organization in Ideological and Political Work for 2023-2024

Case: Promote the implementation of Party discipline education through multiple measures

In 2024, Bao Gang United Steel organized Party discipline education with a high degree of ideological, political, and action consciousness. A work schedule clarifying 18 goals, key learning points, time nodes, and responsible departments was promptly formulated. Party lectures were delivered by the Company's Party Secretary and Chairman personally, with over a hundred participants. A research group was established to conduct full-coverage research and guidance on Party discipline education across all organizations. Party organizations at all levels were organized to study the *Regulations on Disciplinary Actions of the Communist Party of China* and General Secretary Xi Jinping's discourses on comprehensively strengthening Party construction through the establishment of the theoretical learning center group of the Party Committee, "three meetings and one lesson", leading cadres' Party lectures, and thematic discussions, to ensure the effective implementation of Party discipline education.



Special Party Lecture on Party Discipline Education

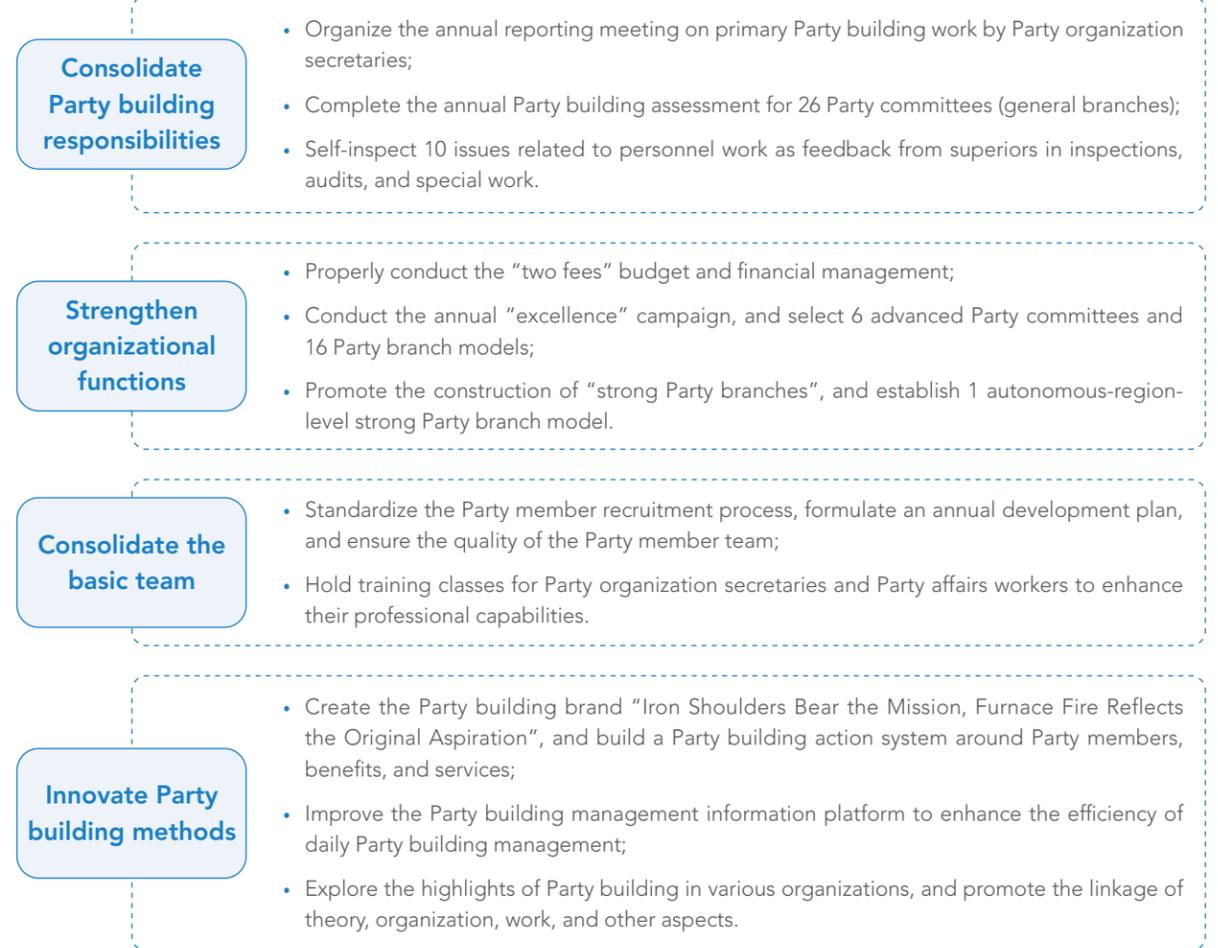
## Consolidate the foundation

Bao Gang United Steel has laid a solid foundation for Party building, strengthened the construction of primary Party organizations, and enhanced the "three basics construction". It standardized the guidance for the change work of 8 Party committees, held the reporting meeting on primary Party building work by Party organization secretaries, completed the 2023 Party building assessment for 26 Party committees (general branches) of Bao Gang United Steel, and promoted high-quality development led by high-quality Party building. Bao Gang United Steel has properly conducted the "two fees" budget and financial management. It allocated RMB 5.3087 million of Party fee for 2024 according to regulations, and regularly trained Party members to enhance the cohesion and combat effectiveness of Party organizations and provide strong political and organizational guarantees for the high-quality development of the Company.

It allocated RMB

**5.3087** million

of Party fee for 2024 according to regulation



Demonstration Training Class for Party Branch Secretaries and Party Affairs Workers

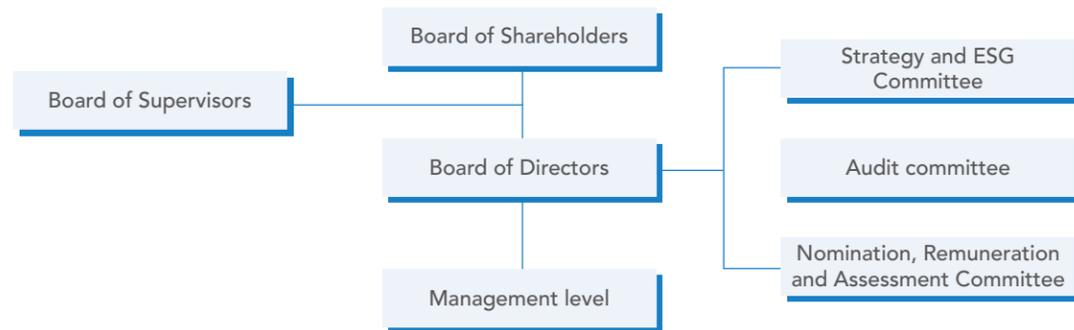
## Standardize corporate governance

Bao Gang United Steel establishes a scientific and reasonable governance architecture, clarifies the responsibilities of governance entities, with the Board of Directors, Board of Supervisors, and management each performing their duties, to make the Company's operations more standardized and efficient. It actively responds to state-owned enterprise reform policies, stimulates enterprise vitality, and improves operational efficiency, to help enhance its market competitiveness.

### Improvement of governance system

In accordance with the *Company Law of the People's Republic of China* and other laws, regulations, and regulatory requirements, Bao Gang United Steel revises certain provisions of the *Articles of Association*, and rules and regulations such as the *Work Rules of Independent Directors*, *Work Rules of the Special Committee of the Board of Directors*, and *Management Measures Raised Funds*, and improves and perfects the corporate governance system.

The Company establishes a modern corporate governance architecture consisting of the shareholders' meeting, Board of Directors, Board of Supervisors, and management, and forms a corporate governance system where the authority, decision-making, supervision, and execution bodies each perform their duties, take their responsibilities, operate in coordination, and effectively balance each other, to continuously enhance the quality of the listed company. At the same time, the Company adheres to the high integration of Party organization construction and corporate governance architecture. Major issues are first studied by the Party committee to fully leverage the Party committee's role in "setting the direction, managing the overall situation, and ensuring implementation".



**Board of Shareholders** The Company convenes and holds meetings of the Board of Shareholders in strict accordance with relevant regulations and requirements. A combination of on-site and online voting is available to provide convenience for shareholders to participate. The Company treats all shareholders equally, and effectively ensures all shareholders' equal rights to know and make decision on major company matters.

**Board of Directors** During tenure, directors fully exercise their rights, fulfill their obligations and responsibilities, and actively safeguard the legitimate rights and interests of the Company and all shareholders. The Company leverages the independence and professionalism of independent directors to continuously enhance the rationality, standardization, and scientific nature of company decisions. The special committees of the Board of Directors fully play their roles in collecting, analyzing, and demonstrating decision-making information to provide strong support for the decisions of the Board of Directors.

#### Board of Supervisors

The Board of Supervisors fully performs its supervisory functions, oversees the Company's financial status, raised funds, related transactions, periodic reports, insider information registrations, and the legality and compliance of the duties performed by the Company's directors and senior managers, reflects the opinions of employees, and safeguards the legitimate rights and interests of the Company, shareholders, and employees.

In 2024, the Company convened

5 Board of Shareholders' meetings, 14 Board of Directors' meetings, 10 Board of Supervisors' meetings, 6 special meetings for independent directors, 15 meetings of Specialized Committee of the Board of Directors

11 members on the Board of Directors<sup>1</sup>, 4 independent directors<sup>2</sup>, 2 female directors

Bao Gang United Steel was awarded the "Outstanding Practice Case of the Board of Directors for the Listed Company" by the Association for Public Companies

It received the highest A-level (excellent) evaluation from the Shanghai Stock Exchange for information disclosure

1.The data is as of April 18th, 2025.  
2.The data is as of April 18th, 2025.

### Deepen state-owned enterprise reform

Bao Gang United Steel focused on the deployment of deepening and enhancing state-owned enterprise reform, aiming to strengthen core functions and improve core competitiveness, comprehensively accelerating the deepening and enhancing of state-owned enterprise reform, and fully advancing key tasks such as the reform of market-oriented operating mechanisms, significantly improving enterprise management and governance capabilities.

In 2024, the Company issued the *Comprehensive Reform Plan of Bao Gang United Steel*, promoting the implementation of 9 categories and 48 specific tasks, respectively setting work goals and measures and clarifying responsible leaders, responsible organizations and responsible persons, with a key task completion rate of 94%. Deepen the new round of tenure-based contract reform, set differentiated assessment indicators and weights according to the "stretch mechanism", promote the matching of performance indicators with job responsibilities and achieve full coverage of contract-based management. Continuously deepen the special campaigns for loss reduction and elimination, as well as enterprise restructuring and reduction and address the operational losses of controlled and equity-participated companies with tailored strategies ("one enterprise, one policy"). All consolidated subsidiaries under control have fulfilled their loss reduction tasks, and the enterprise restructuring and reduction goals have been achieved as planned.



Bao Gang United Steel participated in the Group's reform deepening and enhancing action promotion meeting and the tenure-based contract signing ceremony

## Improvement of compliance system

Bao Gang United Steel regards compliant operation as the core pillar of high-quality development, based on integrity and compliance, comprehensively implementing national laws, regulations, and regulatory requirements, strictly controlling anti-corruption, anti-graft, and anti-unfair competition risks, actively responding to investor concerns by enhancing information disclosure transparency, injecting robust momentum for sustainable development.

### Faithful and compliance management

Bao Gang United Steel strictly adheres to the *Company Law of the People's Republic of China*, *Central Enterprise Compliance Management Measures*, and other relevant laws and regulations, continuously improving compliance management policies and systems, actively practicing compliance culture, strengthening compliance management and control, and creating a standardized and legalized operating environment.

#### • Governance

Bao Gang United Steel established a compliance management committee, building a compliance management work system composed of decision-making level, management level, and execution body, integrating compliance management into the entire process of decision-making, management, execution, and supervision, achieving clear compliance management responsibility boundaries, implementation to positions, and accountability to individuals.

The Party Secretary, Chairman, and General Manager of the Company, as the primary responsible persons for promoting the construction of the rule of law in Bao Gang United Steel, fulfill the roles of key organizers, promoters, and practitioners of compliance management, ensuring that compliance management is advanced from top to bottom. The Chief Compliance Officer is the core management personnel for the Company's compliance management, directly responsible to the Company's principal responsible person. Their main duties include overseeing compliance management affairs, leading the construction and operation of the compliance management system, organizing the lead department for compliance management to carry out specific tasks, and serving as the key leader of the compliance management system. The Company and its affiliated departments, organizations, wholly-owned and controlled subsidiaries have set up 109 compliance officers who possess compliance knowledge and review capabilities. They undertake compliance management and review tasks, communicate with the second and third lines of defense, and ensure the smooth progress of compliance management work.



#### • Strategies

The Company manages compliance risks through four compliance management lists, mainly including the legal and regulatory list, compliance risk list, key position compliance responsibility list, and process control list. In 2024, the Company updated compliance risks, increasing from 212 items to 216 items.

#### • Impact, risk, and opportunity management

##### Improve compliance management

Bao Gang United Steel continuously improves the compliance operation mechanism, promotes the coordination and connection of compliance management with the current management system, achieves the normalization and standardization of compliance management work, and establishes routine compliance and major decision-making compliance review mechanisms. Issue the *Compliance Management Measures of Bao Gang United Steel* and the *Three-Year Compliance Management Action Implementation Plan of Bao Gang United Steel (2023-2025)*, making the compliance management system increasingly complete. Establish a "template library" for Bao Gang United Steel contracts, effectively preventing contract risks. Promote business process and information digitization, laying a solid foundation for the company to update and improve the compliance risk database.

##### Case: Bao Gang United Steel strengthens the regular meeting mechanism for compliance management

Bao Gang United Steel holds quarterly compliance management meetings, where they "set a theme, organize a learning session, and share a batch of cases". These meetings report on the progress of key compliance tasks for the quarter, study and communicate relevant compliance management systems, and share typical cases, comprehensively enhancing the compliance awareness and work level of leaders and professionals in various business areas.



Bao Gang United Steel holds the second quarter compliance management meeting

##### Strengthen compliance risk management

The Company strengthens the management of major compliance risk events, ensuring effective identification and assessment of compliance risks beforehand; fully understanding the specific circumstances of major compliance risk events during the process, collaborating internally, responding quickly, and actively taking countermeasures; and summarizing and reviewing afterward, improving the compliance risk list for the involved business areas, and continuously optimizing processes. Actively carry out compliance risk alert work, obtain compliance risk cases through multiple channels, and use internal and external typical and common compliance risk cases as carriers to conduct in-depth analysis, revealing risk points through special meetings and case notifications, effectively preventing compliance risks.

##### Build a compliance culture

The Company takes opportunities such as the "Civil Code Promotion Month", "National Low Carbon Day", and "12·4" National Constitution Day to conduct centralized promotional activities. Carry out legal publicity through online compliance training courses, offline organization of various special lectures, cloud platform APP and other forms. All employees sign the *Compliance Commitment Letter*, ensuring that they act in accordance with regulations and operate according to rules, using "small compliance" in their positions to support the Company's "comprehensive compliance", creating a good atmosphere that promotes full compliance.



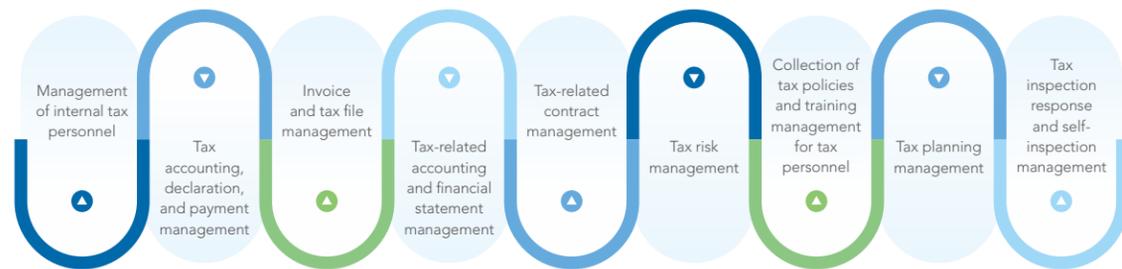
The Company's business legal risk and compliance guidance training course

### Strengthen tax management

The Company strictly adheres to tax laws and regulations, actively establishes and improves the Company's tax management system, and effectively prevents tax risks. The Company's finance department tax management group coordinates overall tax management work, while providing tax guidance and consultation to branches and subsidiaries. The finance departments of each branch and subsidiary are responsible for the internal tax management of their respective companies.

The Company, in accordance with relevant tax management systems, standardizes processes such as tax accounting, declaration and payment, tax file management, and tax-related contract management to ensure timely, accurate, and compliant tax accounting processing. At the same time, the Company actively cooperates with tax authorities in inspections and supervision, effectively carrying out all tax-related work.

In addition, Bao Gang United Steel conducts annual evaluations of the Company's compliance with national tax regulations and internal tax management systems in routine operations, and promptly rectifies any identified issues. During the reporting period, there were no major case of tax violations.



### Indicators and goals

In 2024, the Company reviewed 1,279 compliance items; achieved 100% compliance review for major decisions, important systems, and significant contracts; and had no major litigation, arbitration, or other risk events.

In 2025, Bao Gang United Steel will launch the "Enterprise Compliance Management Capability Enhancement Year", continuously improve the compliance management system, strengthen the three lines of defense in compliance management; develop Bao Gang United Steel's "Compliance System Map, enrich compliance guidelines and manuals across business areas, optimize the quarterly compliance management meeting mechanism, enhance litigation case management, improve supervision and assessment mechanisms, strengthen compliance awareness among employees, and elevate the level of law-based enterprise management.

### Anti-commercial bribery and anti-corruption

Bao Gang United Steel has established a comprehensive anti-commercial bribery and anti-corruption mechanism, and through regular warning education activities, strengthens employees' integrity awareness, resolutely upholds discipline and combats corruption, providing strong support for the Company's high-quality development.

### Governance

Bao Gang United Steel precisely focuses on key areas with high integrity risks and weak supervision, adding disciplinary committees in 14 key units and adding full-time disciplinary inspection cadres in another 3 organizations, effectively improving the quality and efficiency of supervision work.

### Strategies

Based on the current management status and issues identified through inspections, audits, and other work, the Company categorizes integrity risks into ideological and moral risks, key area risks, external environment risks, institutional mechanism risks, job responsibility risks, and business process risks. In 2024, the Company supervised and guided various units to identify 1,027 integrity risks, optimized 258 work processes, promoted the revision and improvement of 168 systems, and facilitated the resolution of 73 issues.



Risk type	Description
Ideological and moral risks	Insufficient in-depth study of Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, leading to wavering ideals and beliefs. Weak sense of purpose in work, with serious formalism and bureaucracy. Poor sense of integrity and self-discipline, lacking in family ethos construction.
Key area risks	In numerous functional business areas such as strategic management, procurement and marketing, and engineering construction, due to their high level of specialization, there is a tendency for internal management to be non-standard and insufficient risk identification.
External environment risk	Due to the impact of industry "unspoken rules", company personnel may exhibit behavioral misconduct, constituting illegal activities such as commercial bribery.
Institutional mechanism risks	Incomplete regulations on the exercise of authority, large discretionary space, and lack of checks and balances and supervision.
Position responsibility risks	Due to the special nature of position responsibilities, influenced by requests from specific related parties, leaders or key personnel may deviate from behavioral norms and professional ethics, leading to improper performance or inaction.
Business process risks	Non-standard business processes or lack of control and supervision, failing to form closed-loop management, with loopholes that may allow personnel to exploit their positions for personal gain or engage in power-money transactions.

## • Impact, risk, and opportunity management

The Company continues to improve the anti-corruption institutional system, carries out honest administration and anti-corruption activities, and cultivates a culture of integrity, providing a solid foundation for long-term stable development.

### Improve the institutional system

Bao Gang United Steel insists on integrating system construction throughout the entire process and all aspects of honest administration and anti-corruption, improving the institutional system, strictly enforcing systems, and enhancing governance efficiency. The Company focuses on key areas, critical links, and key positions, especially high-risk areas, positions, and management positions with authority over "people, finance, materials, and affairs", to improve a transparent execution system. Systematically organize regulations according to the principle of correspondence between authority and systems, ensuring that where there is authority, there are systems, and where there are risks, there are preventive measures.

### Routine supervision and inspection

Bao Gang United Steel conducts detailed and practical routine supervision, carrying out special rectification on typical and prominent issues found during supervision, inspection, and investigation. Advance the "three no-corruptions" in an integrated manner, promote the integration of "punishment, prevention, and governance", maintain a high-pressure stance against corruption, deepen case-driven reforms, and promote normalized and long-term governance. Continue to consolidate the spirit of the Central Committee's eight-point decision, strengthen supervision and reminders on key nodes and "key minorities", persist in special governance such as "extortion during vehicle unloading" and key clue verification, and thoroughly address the issues of misconduct and corruption around the masses, fostering a new atmosphere of integrity. Adhere to strict investigation of various problem clues, and do a good job in the "second half of the article" of case handling, seriously addressing issues such as loopholes in the system or inadequate implementation of the system found during the investigation.

### Create an anti-corruption atmosphere

Bao Gang United Steel urges all organizations to conscientiously study and implement the newly revised *Regulations on Disciplinary Actions of the Communist Party of China*, deepen the use of the "positive integrity education + negative warning education" collaborative mechanism, and promote the normalization and long-term effectiveness of party discipline education. Targetedly, through various channels such as holding warning education conferences, party committee theoretical study center group meetings, and "three meetings and one class", typical cases are reported to strengthen warning education, with a 100% coverage rate in all units.



Bao Gang United Steel held 2024 Meetings on Party Conduct and Upholding Integrity Construction and Anti-corruption Work, and Warning Education Conference



Bao Gang United Steel's Party Organization conducts integrity education activities on party members' and cadres' knowledge of discipline and law

## Reporting and whistleblower protection

Bao Gang United Steel fully leverages the role of supervision synergy, openly and smoothly provides channels such as reporting boxes, and reporting hotlines to encourage employees, customers, suppliers, and any other informed individuals to report violations of discipline and law such as corruption. The Company publicizes the complaint and reporting mechanism through Baotou Daily, WeChat public account, internal work notices, and other forms to further enhance employees' awareness of the Company's reporting channels. At the same time, the Company attaches great importance to protecting whistleblowers, strictly ensures the confidentiality of reporting information and whistleblowers, and safeguards the legitimate rights and interests of whistleblowers.

## • Indicators and goals

In 2024, the Company will achieve full coverage of discipline and law education for party members and employees. In 2025, the Company will achieve full coverage of honest administration and anti-corruption education and training for party members and employees.

## Anti-unfair competition

The Company strictly adheres to the *Anti-monopoly Law of the People's Republic of China* and the *Anti-unfair Competition Law of the People's Republic of China*. Pay attention to the risks of anti-monopoly, concentration of operators, and abuse of market dominance that may be faced in strategic cooperation, joint ventures, and other areas, and include fair competition in the scope of compliance review. Regularly organize training and seminars, inviting industry experts to teach, to enhance employees' ability to identify and prevent unfair competition practices. Establish an internal supervision mechanism for anti-unfair competition to provide strong support for the Company's steady development. During the reporting period, the Company was not involved in any litigation or significant administrative penalties due to unfair competition practices.



When planning to establish a joint venture with partners: analyze and sort out the anti-monopoly risks of operator concentration.



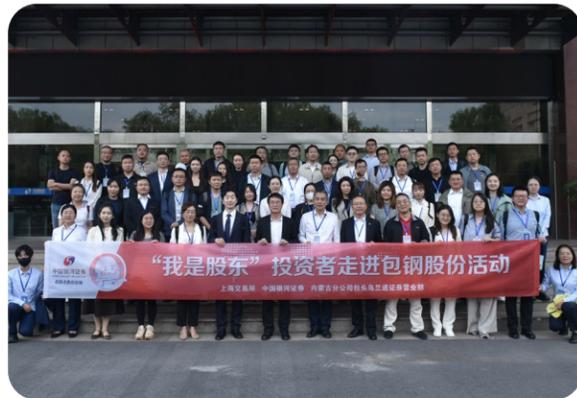
When adding new strategic cooperation or joint venture projects: conduct internal review and evaluation of operator concentration.



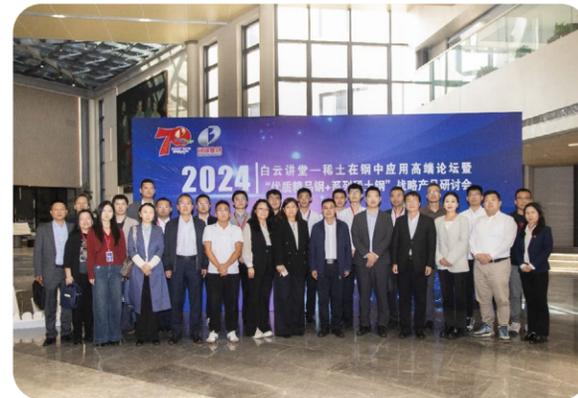
When attending industry association meetings, product ordering meetings, etc.: avoid discussing price, market segmentation, etc. with competitors or upstream and downstream customers; avoid using one's market dominance to require the counterparty to trade with oneself or a designated third party, thereby creating the risk of abusing market dominance.

## Investor relations management

Bao Gang United Steel attaches great importance to the protection of investors' rights, respects investors, rewards investors, and protects investors. In accordance with relevant laws and regulations and the Shanghai Stock Exchange's regulations on information disclosure by listed companies, the Company promotes communication and interaction with investors through various channels, laying a solid foundation for the Company's sustained and stable development.



Small and medium investors visit Bao Gang United Steel



Bao Gang United Steel hosts the 2024 Baiyun Forum - High-end Forum on Rare Earth Applications in Steel and Strategic Product Seminar on "Premium Quality Steel + Rare Earth Steel Series"

Communication and exchange with investors	The Company adheres to the "inviting in" and "going out" strategy. On one hand, the Company, in collaboration with the exchange and securities firms, organized two "Investors Visit Bao Gang United Steel" activities, where more than 70 industry professionals visited and learned about the Company's operations. Through strategic product seminars, the Company invited more than 40 professionals for research. In addition, the Company received visits from multiple securities firms and investment institutions. On the other hand, the Company's leadership led roadshows in multiple locations, promoting the Company's strengths, with more than 30 fund companies and securities firms participating, effectively enhancing investors' recognition and confidence in the company.
Routine communication channels are smooth	The Company actively responds to investors through various channels, patiently answers consultation calls, and addresses inquiries via interactive platforms and collective online reception activities. Hold three regular report performance briefings, innovatively adding explanation and presentation sessions.
In terms of public opinion management and media promotion	The Company strengthens online public opinion monitoring, releases highlight news on popular platforms, and promotes company performance through cooperative media to enhance shareholders' understanding of major matters.
Market value management is orderly	The Company monitors stock prices daily and compares them with peers, forming reports; analyzes shareholder registers monthly, tracks changes in key investors' holdings; compares data from 28 steel companies to assess its position, drafts analysis reports, and formulates measures.
Protection of rights and interests of shareholders	To enhance investor confidence, the Company has released a buyback plan. It repurchased 116,322,900 shares with its own funds through centralized bidding trading, which will complete the cancellation in March, 2025. The Company has formulated a market value management plan to safeguard company value and shareholder rights, improving long-term incentive mechanisms.

## Innovation-driven development

Bao Gang United Steel actively responds to the national and regional strategic call for "implementing innovation-driven development", adheres to the guidance of technological innovation and progress, focuses on improving organizational mechanism innovation, continuously stimulates the vitality of research entities, enhances R&D efficiency, strengthens independent innovation capabilities, accelerates the construction of an innovative Bao Gang United Steel, with annual R&D investment intensity reaching 5.46%, making technological innovation the primary driving force for the Company's development.

### Governance

Bao Gang United Steel established the "Science and Technology Management Committee", adhering to the working principles of "efficiency, pragmatism, simplicity, transparency, and compliance", strengthens the management of the Company's technology innovation work, and ensures the orderly advancement of the Company's technology management.

#### The Science and Technology Management Committee focuses on the following responsibilities



## Strategies

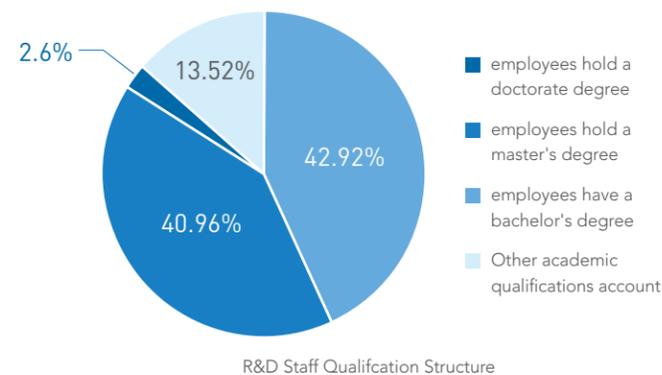
Risk	Risk description	Measures
Technical risks	The development of new technologies may cause technical difficulties to be overcome, or the expected results to not be achieved due to the immaturity of the technology, which may cause scientific research projects to be delayed or fail.	<ul style="list-style-type: none"> <li>Strengthen feasibility studies and assessments before technology R&amp;D, and comprehensively analyze technical difficulties and potential risks;</li> <li>Establish technical backup plans to enable timely switching or adjustment when encountering technical problems;</li> <li>Continue to track technological development trends and introduce external technical resources.</li> </ul>
Market risks	<p>The market demand is unstable and changes rapidly, forecasts of market demand for new technologies and new products are inaccurate, and it is difficult to transform innovative results into actual value;</p> <p>The market competition is fierce, and competitors may launch similar or more advanced technologies and products more quickly to seize market share.</p>	<ul style="list-style-type: none"> <li>Strengthen market research and improve the accuracy of market forecasts;</li> <li>Develop diversified market strategies to reduce dependence on a single market;</li> <li>Adjust innovation direction and product functions in a timely manner according to market changes to improve product market adaptability.</li> </ul>

## Impact, risk, and opportunity management

### • Strengthen the foundation for innovation

Bao Gang United Steel revised and issued the *Scientific Research Project Management Measures of Bao Gang United Steel* and issued the *Notice on Further Adjustment and Optimization of Relevant Management Authority of Scientific Research Institutions*. Optimize the promotion and evaluation mechanism for scientific research talents, and fully stimulate and mobilize the creative vitality and motivation of scientific researchers through equity, options, dividends, etc. Establish long-term and regular industry-university-research cooperation mechanisms with scientific research institutes, strengthen internal and external cross-unit collaborative cooperation on common technologies, and realize resource sharing. Establish a rigid growth mechanism for R&D investment, and improve a scientific research management system with clear powers and functions, scientific evaluation, and tolerance and error correction. Establish a smoother process for the use of scientific research funds, and grant greater rights to introduce and use talent. Establish a scientific and complete fault-tolerant mechanism for scientific and technological innovation, and encourage scientific and technological personnel to take positive actions and innovate boldly.

In 2024, the Company owned and participated in the construction of 2 national scientific research platforms, 3 provincial platforms, and 2 academician workstations. Promote the construction of a talent enclave, establish "Beijing Baogang Steel Technology Co., Ltd.", and obtained approval as a listed institution outside the autonomous region's "Mengkeju" collaborative innovation zone.



### Case: Enabling innovative development, Bao Gang United Steel joins hands with University of Science and Technology Beijing to build a talent enclave

Bao Gang United Steel is comprehensively promoting innovation-driven development and actively connecting with University of Science and Technology Beijing to jointly build a talent enclave. In 2024, based on the establishment of the Joint Innovation Center of Bao Gang United Steel and University of Science and Technology Beijing, "Beijing Bao Gang United Steel Technology Co., Ltd." will be registered to jointly build an innovation consortium with deep integration of industry, academia and research. The study and research activity that "ten thousand students visit hundreds of enterprises at Beijing science and technology enterprise tour" was held, attracting 25 masters and 3 doctoral students to exchange ideas. Launch the Steel Backbone Class, which will jointly train high-quality talents through projects to build momentum for innovative development.

### Case: Bao Gang United Steel won another great result in 2024 China Innovation Method Competition

In November 2024, the final of China Innovation Method Competition came to an end. The Bao Gang United Steel team performed well and finally won 1 second prize, 1 third prize and 3 excellence prizes, demonstrating the outstanding level of innovation method application and enterprising spirit of scientific and technological workers.



China Innovation Method Competition Final Scene

### • Scientific research project management

Bao Gang United Steel optimizes the layout of scientific research projects around national strategies, industry development, market demand and corporate innovation. In 2024, the Company undertook and would participate in two sub-projects of the 2030 National Special R&D Plan for New Materials, one technology innovation center project of rare earth new materials, one key laboratory funding subsidy project of the autonomous region, and five key Class A projects of Baogang Group; accelerate the cultivation of original scientific research results. Three scientific research projects have been approved for central guidance of local science and technology development funds; relying on the autonomous region's rare earth steel product research and development key laboratory, 67 varieties and nearly 300 grades of new rare earth steel materials have been formed.

## • Provide high-end products

The Company is accelerating its adjustment pace by targeting high-end production lines and products, implementing high-end production line upgrades, continuously increasing the proportion of mid-to-high-end products, and enhancing industrial capabilities and product competitiveness. In 2024, the Company completed 11 quality and efficiency improvement projects, including the carbon reduction and pollution reduction upgrade of non-oriented silicon steel annealing furnaces and the new construction of a 150-ton RH refining furnace. This is of great significance for developing the Company's unique high-end products. Baogang's high wear-resistant and high-strength rare earth steel plate series have won the China Steel Industry Award for Product Development and Market Expansion.



Completion of the Carbon Reduction and Pollution Reduction Upgrade Project for Non-oriented Silicon Steel Annealing Furnaces



Successful development and mass production of rare earth oriented silicon steel

## • Achievement application and transformation

By optimizing production processes and adjusting product structures, Bao Gang United Steel continues to improve product quality and reduce production costs, focusing on key challenges to enhance the transformation of scientific and technological achievements, with a transformation rate of 68%. Achieve the first launch of 12 products, successfully develop 165 new varieties, with multiple products filling regional gaps and develop 12 new steel materials for new energy projects. Throughout the year, 150 innovation achievements were granted with utility model patents, 2 scientific research achievements were awarded with industry and regional awards, and the "Green and Low-Carbon New Technology and Equipment for Full Dry Method Waste Heat Recovery of Converter Gas" reached international leading levels.

### Key technological achievements in 2024

- Achieve the first launch of L360MH hydrogen transmission pipeline steel in China, with nearly 27,000 tons of hydrogen transmission pipeline steel supplied in bulk, becoming the raw material supplier for the construction of the first long-distance, large-diameter, high-pressure natural gas hydrogen-blended pipeline in China.
- Following the national energy structure adjustment and clean energy development, 500MPa rare earth wind power steel was applied in the Baiyun Obo 150MW green power project.
- The independently developed zinc-aluminum-magnesium steel for solar thermal use successfully broke the long-term dependence on imports for steel used in solar thermal power projects. It has been successively applied in multiple projects in Xinjiang, Qinghai, and other regions.
- Achieve the first launch of export hot-rolled IH rails with the highest hardness of 325HB in China.
- Independently design the composition system of H400 hypereutectoid steel rails and successfully produce H400 hypereutectoid high-strength wear-resistant steel rails in bulk for the first time, achieving a historic breakthrough in the promotion and application in the high-end heavy-haul railway market.



## Science and technology awards in 2024



- The project titled *Mechanism and Industrial Application of Rare Earth Microalloying in Non-API Standard Oil Casing* won the second prize of the Rare Earth Science and Technology Award.
- The project titled *Research on the Upgrade and Optimization of the Packaging System for Seamless Steel Pipes* won the second prize of the Metallurgical Science and Technology Award.



The first domestic hydrogen-blended long-distance pipeline steel was successfully delivered.

## • Intellectual property protection

Bao Gang United Steel revised and issued the *Patent Work Management Measures of Bao Gang United Steel* in accordance with the *Patent Law of the People's Republic of China*, *Implementation Rules of the Patent Law of the People's Republic of China*, and *Patent Work Management Measures of Baogang Group*, comprehensively stipulating management institutions and responsibilities, patent system application, application, implementation maintenance, and protection. In external cooperative development, commissioned research, and cooperative scientific research projects, the cooperation agreement must clearly define the ownership of patent application rights and patent rights for R&D results. At the same time, employees must comply with the agreement with the Company regarding confidential information and intellectual property. By the end of 2024, the Company owned 2,316 valid patents, including 447 invention patents.

## Indicators and goals

Bao Gang United Steel was rated as a high-tech enterprise. In 2024, the Company invested RMB 3.7 billion in technological innovation, accounting for 5.46% of total operating revenue, achieving the set target; 892 patents were applied for, including 449 invention patents.

By 2025, the Company's technology investment will not be less than 4.35% of total operating revenue.

In 2024, the Company invested

RMB **3.7** billion

in technological innovation

# ESG management

Bao Gang United Steel integrates ESG philosophies into company management and operations, organizes and builds an ESG governance architecture, solidly advances ESG-related work, develops the *Special Plan for Sustainable Development Management Improvement of Bao Gang United Steel*, and gradually promotes the update and optimization of ESG management systems and ESG indicator systems, laying a solid foundation for continuously improving sustainable development management levels.

## ESG architecture

Bao Gang United Steel researches and builds an ESG governance architecture composed of three levels: the Board of Directors, the Board of Directors' Strategy and ESG Committee, and the ESG working group. The Board of Directors is the highest responsible institution for the Company's ESG management operation and information disclosure, the Board of Directors' Strategy and ESG Committee is responsible for formulating ESG goals and related systems, and the ESG working group, as the main coordination and execution institution, coordinates and promotes the implementation of ESG-related matters.

Responsibilities of the Board of Directors	<ul style="list-style-type: none"> <li>Review and approve the Company's ESG goals and strategic plans;</li> <li>Review and approve the Company's ESG governance architecture and key policies;</li> <li>Review and approve the Company's ESG report;</li> <li>Review and approve the public disclosure of the Company's ESG-related performance;</li> <li>Review ESG-related risks with significant impact and response plans for major ESG negative events.</li> </ul>
Responsibilities of the Board of Directors' Strategy and ESG Committee	<ul style="list-style-type: none"> <li>Research and provide recommendations on the Company's ESG goals and plans, ESG governance architecture and policies, ESG-related policies, ESG reports, and other matters;</li> <li>Identify and monitor ESG-related risks and opportunities with significant impact on the Company's business, and guide management to take appropriate measures to address ESG risks and opportunities;</li> <li>Organize and coordinate the supervision and inspection of the Company's ESG-related policies, management, performance, and target progress, and provide corresponding recommendations;</li> <li>Review and submit the Company's ESG-related reports to the Board of Directors;</li> <li>Review matters related to the Company's ESG, etc.</li> </ul>
Responsibilities of ESG Working Group	<ul style="list-style-type: none"> <li>Develop ESG-related policies and action plans aligned with the Company's strategy and ESG goals;</li> <li>Manage ESG-related risks and matters in the Company's routine operations;</li> <li>Communicate with relevant departments and subsidiaries of the Company, and coordinate the implementation of ESG-related matters;</li> <li>Collect, organize, and compile the Company's public disclosure on ESG-related performance;</li> <li>Other ESG-related matters.</li> </ul>

# ESG practices

Bao Gang United Steel has gradually achieved sustainable development through initiatives such as issuing social responsibility/sustainability reports and conducting social responsibility/ESG training. Based on the continuous release of social responsibility reports for five years, the Company compiled and released the *2023 Annual Sustainability Report* for the first time in 2024.

### ★ Case: Preparation of 2024 Annual Sustainability Report of Bao Gang United Steel

On December 24, 2024, Bao Gang United Steel held a special training session on Environmental, Social, and Governance (ESG) and the kick-off meeting for the preparation of 2024 Annual Sustainability Report. The meeting provided in-depth explanations from six aspects, including ESG trends and requirements, interpretation of the *Guidelines for Sustainability Reports of Listed Companies*, and the conceptualization of 2024 Annual Report, offering insights for Bao Gang United Steel to enhance its ESG management level.



Bao Gang United Steel holds ESG Special Training and 2024 Sustainability Report Preparation Kick-off Meeting

## Stakeholder communication

Bao Gang United Steel places high importance on stakeholder management, establishing regular communication channels with all parties to promptly understand the expectations and demands of the government, regulatory agencies, shareholders, employees, customers, suppliers, the public, and the media. Through various measures, the Company actively responds and incorporates the concerns of all parties into its operations and strategic decision-making processes, ensuring stakeholders' rights to information, participation, expression, and supervision.

Stakeholder	Expectations and needs	Communication and response
Government bodies and supervisory authorities	<ul style="list-style-type: none"> <li>Compliance management</li> <li>Tax payment according to laws</li> <li>Anti-corruption</li> <li>Prevention and control of pollution</li> <li>Work safety</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of company governance</li> <li>Strengthening compliance risk management</li> <li>Consciously accept supervision</li> <li>Actively fulfill tax obligations</li> <li>Enhancing integrity construction</li> <li>Compliance with laws and regulations</li> <li>Green production and operations</li> </ul>
Shareholders and investors	<ul style="list-style-type: none"> <li>Related transaction</li> <li>Information disclosure transparency</li> <li>Company governance</li> <li>Investor relations management</li> <li>Return on investment</li> </ul>	<ul style="list-style-type: none"> <li>Establish a related party transaction price adjustment mechanism</li> <li>Information disclosure according to law</li> <li>Holding Board of Shareholders</li> <li>Establish multi-channel communication platforms</li> <li>Participate in investor exchange activities</li> </ul>
Employee	<ul style="list-style-type: none"> <li>Protection of rights and interests of employees</li> <li>Occupational health and safety</li> <li>Vocational training and development</li> <li>Remuneration and welfare protection</li> <li>Employee caring</li> </ul>	<ul style="list-style-type: none"> <li>Improve safeguard mechanisms</li> <li>Regulating work safety</li> <li>Conduct regular employee training</li> <li>Employee satisfaction survey</li> <li>Provide assistance to employees in need</li> <li>Congress of workers and employees</li> <li>Organize diverse cultural and sports activities</li> </ul>
Customer	<ul style="list-style-type: none"> <li>Product quality</li> <li>Customer privacy protection</li> <li>Customer service</li> </ul>	<ul style="list-style-type: none"> <li>Product innovation and R&amp;D</li> <li>Application of intelligent technology</li> <li>Strengthen product quality management system construction</li> <li>Standardize information security management</li> <li>Customer satisfaction survey</li> </ul>
Suppliers and partners	<ul style="list-style-type: none"> <li>Fair competition</li> <li>Eliminate commercial bribery</li> <li>Responsible procurement</li> <li>Supplier management</li> <li>Win-win cooperation</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of supplier eligibility mechanism</li> <li>Strengthening supplier management</li> <li>Participating in industry exchanges</li> </ul>
Public	<ul style="list-style-type: none"> <li>Public welfare and charity</li> <li>Prevention and control of pollution</li> </ul>	<ul style="list-style-type: none"> <li>Organize and participate in public welfare activities</li> <li>Green production and operations</li> </ul>
Media	<ul style="list-style-type: none"> <li>Compliance management</li> <li>Information disclosure</li> </ul>	<ul style="list-style-type: none"> <li>Enhance communication with the media</li> <li>Consciously accepting media supervision</li> <li>Improve the timeliness and quality of information</li> </ul>

## Substantive issue identification

In 2024, Bao Gang United Steel, in accordance with the latest international disclosure standards such as the *European Sustainability Reporting Standards (ESRS)* and the *International Financial Reporting Standards - Sustainability Disclosure Standard No. 1 - General Requirements for Sustainability-related Financial Information Disclosure (IFRS S1)*, strictly adheres to the requirements of the Shanghai Stock Exchange's *Self-Regulatory Guidelines for Listed Companies No. 14 - Sustainability Report (Trial)*. The Company updates its assessment methods, conducts a dual materiality assessment for the first time, integrates financial perspectives into the previous impact materiality assessment, fully incorporates the views of multiple departments and stakeholders, comprehensively analyzes the impact of ESG issues on the Company's finances, economy, environment, and society, and focuses on responding to 12 financially material issues in this report.

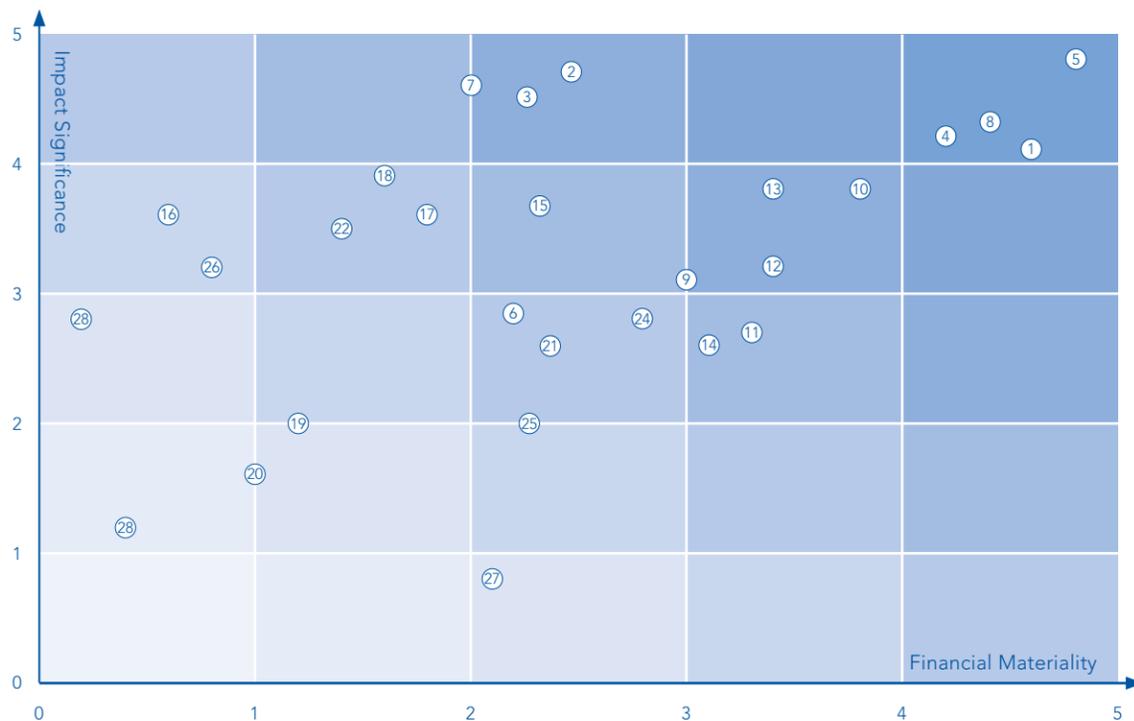
### • Dual materiality assessment process



• Material issue database

1.Environmental compliance management	2.Waste disposal	3.Pollutant emission	4.Utilization of water resources
5.Combat with climate change	6.Circular economy	7.Ecosystem and biodiversity protection	8.Energy utilization
9.Work safety	10.Innovation driving	11.Employees	12.Product and service safety and quality
13.Supply chain security	14.Provision of high-end products	15.Digital transformation	16.Assisting industry development
17.Rural revitalization	18.Social contribution	19.Equal treatment for small and medium enterprises	20.Data Security and Customer Privacy Protection
21.Compliance management and risk prevention	22.Supply chain ESG management	23.Stakeholder communication	24.Anti-commercial bribery and anti-corruption
25.Anti-unfair competition	26.Leadership of Party building	27.Due diligence	28.Technology ethics

• ESG materiality issue matrix



ESG honors



In 2024, Bao Gang United Steel's Wind ESG rating jumped from "BB" to "A"

The 2023-2024 information disclosure work received the highest A-level (excellent) evaluation from the Shanghai Stock Exchange

Bao Gang United Steel was awarded as the "Excellent Practice Case of the Board of Directors for the Listed Company" and the "Best Practice of the Board of Directors' Office for the Listed Company in 2024" by the Association for Public Companies



**包钢股份 600010.SH**  
 所属万得三级行业：  
 金属、非金属与采矿  
 ESG综合得分：7.29/10  
 行业排名：14/293

Bao Gang United Steel's Wind ESG rating upgraded to "A"

# Future prospects

Build dreams together and embark on a new journey. 2025 is the final year of the 14th Five-Year Plan and the year to lay out the 15th Five-Year Plan. We will continue to focus on our corporate vision of "building the world's best rare earth steel new material production base and becoming an excellent supplier of high-quality rare earth steel new material ". We will remain confident, emancipate our minds, work hard, take responsibility, innovate boldly, deepen reforms to improve quality and efficiency, forge ahead in the wave of creating first-class enterprises, carve out a new path for the high-quality development of Bao Gang United Steel, and create a new era of high-quality development for the enterprise!



# Annex

## Key performance

Indicator		Unit	2022	2023	2024
<b>Economic performance</b>					
Operation performance	Operating revenue	RMB ten thousand	7,217,175.39	7,056,538.86	6,808,944.06
	Operating cost	RMB ten thousand	6,659,094.58	6,370,751.60	6,272,606.36
	Operating profits	RMB ten thousand	-101,456.43	50,870.36	9,857.08
	Total profits	RMB ten thousand	-122,286.62	42,026.04	8,583.63
	Net profits	RMB ten thousand	-144,494.05	2,960.42	2,074.89
Innovation driving	R&D investment	RMB ten thousand	293,104.98	376,551.82	371,955.43
	Proportion of R&D investment in business revenue	%	4.06	5.34	5.46
	Number of R&D employees	Person	1,272	2,032	1,997
	Proportion of R&D employees	%	4.52	7.51	7.91
	Total number of valid patents	Item	1,728	2,015	2,316
	Number of patents applied	Item	745	774	892
	Number of new patents granted annually	Item	449	440	324
	Number of new invention patents granted annually	Item	62	70	117
<b>Environmental performance</b>					
Environmental compliance management	Environmental investment	RMB 100 million	46.6	56.6	37.71
	Number of environmental pollution	Item	0	0	0
	Environmental fines faced during the fiscal year	RMB ten thousand	0	0	0

	Proportion of sites with environmental risk assessments	%	100	100	100
	Proportion of sites certified with ISO14001 environmental management system	%	100	100	100
	Employee training coverage rate on environmental protection	%	100	100	100
Energy consumption	Total energy consumption	Tce coal	9,211,580.50	9,846,615.58	9,431,287.00
	Total energy consumption per million revenue	Tce coal	127.63	139.54	138.51
	Comprehensive energy consumption per ton of steels	Ton of standard coal / ton of crude steel	691.27	677.95	629.11
	Steam consumption	Tce coal	764,058	767,121.24	867,641.35
	Total fuel oil consumption	Ton	41,629.19	37,669.76	38,225.08
	Diesel oil consumption	Ton	41,547.75	37,602.94	38,156.71
	Gasoline consumption	Ton	81.44	66.82	68.37
	Coal consumption	Ton	9,592,785.95	9,912,620.49	9,782,357.68
	Natural gas consumption	m <sup>3</sup>	100,151,295.00	83,860,824.00	98,269,505.00
	Total electricity consumption	Hundred million kWh	92.94	100.26	86.53
	Waste heat energy consumption	Tce coal	764,058	767,121.24	867,641.35
	Waste heat and energy recovery utilization rate	%	89.79	85.86	85.15
	Self-generated electricity	Hundred million kWh	50.6	52.44	65.46
	Self-owned clean energy generation capacity (PV power generation)	MW	23.95	41.45	41.45
	Annual self-owned clean energy generation (PV power generation)	Ten thousand kWh	2,022.00	2,646.00	2,943.95

Utilization of water resources	Total water consumption	Ten thousand m <sup>3</sup>	309,742.45	295,961.88	285,034.53
	Total water consumption per million revenue	Ten thousand m <sup>3</sup>	4.2917	4.2083	4.1862
	Fresh water consumption	Ten thousand m <sup>3</sup>	6,511.00	6,535.00	5,801.73
	Fresh water consumption per ton of steel	Ten thousand m <sup>3</sup>	4.59	4.3	3.87
	Recycled water consumption	Ten thousand t	303,231.45	289,426.88	279,232.80
	Water resource reuse rate	%	97.9	97.79	97.96
	Waste water emission	Ten thousand t	1,183.34	642.29	314.72
Pollutant emission	Nitrogen oxide (NO <sub>x</sub> ) emission	Ton	14,498.95	12,018.92	9,518.76
	Sulphur dioxide (SO <sub>2</sub> ) emission	Ton	6,731.83	5,944.69	4,003.8
	Sulphur dioxide emission per ton of steel	Kg/ton of crude steel	0.47	0.39	0.27
	Particulate emission	Ton	8,291.02	7,250.31	5,390.29
	Chemical oxygen demand (COD) emission	Ton	271.08	130.72	44.27
	Ammonia nitrogen (NH <sub>3</sub> -N) emission	Ton	18	4.09	3.04
	Chemical oxygen demand (COD) emission intensity	Kg/ton of steel	0.0191	0.0085	0.003
	Dust and particulate emissions per ton of steel	Kg/ton of crude steel	0.58	0.48	0.36
	Ammonia nitrogen (NH <sub>3</sub> -N) emission intensity	Kg/ton of steel	0.0013	0.0003	0.0002
	Waste disposal	Total waste generation	Ten thousand t	1,195.42	1,063.80
General waste generation		Ten thousand t	1,166.81	1,051.80	1,300.90
Total non-harmful waste generated per million revenue		Ton	161.67	149.05	191.06
General wastes recycled		Ten thousand t	803.04	714.88	959.13
Total hazardous wastes		Ten thousand t	28.61	12	22.79

Clean production	Total harmful waste generated per million revenue	Ton	3.978	1.70	3.347
	Hazardous wastes recycled	Ten thousand t	26.05	9.14	13.11
	Comprehensive utilization rate of steel slag	%	100	100	100
Clean production	Dust and sludge recovery utilization rate	%	100	100	100
	Green coverage rate in plant area	%	48.8	50.1	50.1
	Social performance				
Protection of rights and interests of employees	Labour contract signing rate	%	100	100	100
	Proportion of employees covered by collective agreements	%	100	100	100
	Social insurance coverage rate	%	100	100	100
	Total number of employees	Person	28,547	27,274	25,432
	Number of part-time employees	Person	0	0	0
	Number of employees from minority groups	Person	2,344	2,228	2,139
	Turnover rate of employees	%	0.22	0.37	0.35
	Number of employees assisted	Person	694	756	339
	Number of employees assisted per million revenue	Person	0.00962	0.01071	0.00498
	Average days of paid leave per employee	Day	12	12	12
	Number of recruited demobilized soldiers	Person	0	0	45
	Proportion of employees from disabled group	%	-	-	1.83
	Number of discrimination and harassment-related incidents	Nos.	0	0	0
	Proportion of employees trained on anti-discrimination and anti-human rights violations	%	16	25	25
	Number of child labor, forced labor, and human trafficking incidents	Nos.	0	0	0

Career development and training	Employee training coverage rate	%	100	100	100
	Total training duration of employees	Hour	4,690,799	6,035,979	5,732,354
	Per capita duration of employee training	Hour	146	226	225
	Proportion of employees receiving vocational and skills training	%	100	100	100
Occupational health and work safety	Occupational health check-up coverage rate	%	100	100	100
	Work injury insurance investment	RMB ten thousand	2,221	2,122	2,274
	Number of person-times involved in training on work safety	Person-time	118,519	176,720	186,060
	Duration of training on work safety	Hour	1,201,940	1,967,555	2,083,872
	Average safety training duration per employee	Hour	43.32	71.6	78.3
	Coverage rate of safety risk protection training	%	100	100	100
Product and Service Safety and Quality	Quantity or percentage of products that need to be withdrawn or recalled due to health and safety reasons	%	0	0	0
	Customer satisfaction	%	97.91	96.87	97.17
Supply chain security	Number of suppliers	Nos.	1,222	1,462	1,632
	Number of suppliers in mainland China	Nos.	1,219	1,459	1,632
	Number of suppliers audited and evaluated annually for corporate social responsibility, environmental, and other ESG-related aspects	Nos.	1,222	1,462	1,632
	Proportion of procurement orders on the bidding and procurement platform	%	100	100	100
Social contribution	Total volunteer service hours	Hour	13,000	900	11,730
	Average volunteer service hours per person	Hour	6.5	4.5	2.5

Governance Performance					
Company governance	Proportion of independent directors	%	35.71	45.45	36.36
	Proportion of female directors	%	7.14	9.09	18.18
	Number of meetings of the Board of Directors	Times	15	14	14
	Member attendance rate for the Board of Directors	%	100	100	100
	Number of directors attending less than 75% of meetings	Person	0	0	0
	Number of meetings of Audit Committee	Times	9	7	10
	Number of meetings of Nomination, Remuneration and Assessment Committee	Times	2	4	1
	Proportion of women in senior management	%	16.67	20	16.67
	Proportion of operation points that have conducted a corruption risk assessment	%	100	100	100
	Proportion of senior management holding shares	%	0.00082	0	0
	Stock pledge ratio	%	14.34	18.02	13.91



## Index of indicators

Contents		Global Reporting Initiative (GRI Standards)	Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG6.0)
About this report		GRI101	P1.1-1.2
Address by chairman		GRI102	P2.1
About Bao Gang United Steel		GRI102	P3.1-3.4
New glory - 2024 responsibility events		-	S2.1.13-2.1.14
<b>Responsibility issue I:</b> Strengthening the brand and forging new materials for major national equipment		GRI203	S2.1.1-2.1.3,S2.1.14
<b>Responsibility issue II:</b> Empowering intelligence, and activating a new engine for the industry		GRI203	S2.1.3,S2.1.13-2.1.14
<b>Responsibility issue III:</b> Rare treasure house, broad prospects for diversified development		GRI304	E3.1.4-3.1.5
<b>Environment:</b> "Steel" flowers bloom with green vitality	Strengthen environmental management	GRI307	E2.4.1-2.4.4
	Combat with climate change	GRI305	E1.1.1-1.1.6,E1.1.12,E1.1.14-1.1.16,E1.1.19
	Promote green production	GRI302,GRI303,GRI305,GRI306	E3.1.2,E3.1.5,E3.1.8-3.1.9,E3.2.3-3.2.4,E2.1.1,E2.1.4,E2.1.6-2.1.8,E2.2.5-2.2.7
	Protect ecological balance	GRI304	E2.3.1-2.3.5
<b>Society:</b> Build dreams and benefit the people	Customer orientation, quality first	GRI416,GRI417,418	S3.3.1-3.3.6,S3.4.3-3.4.4
	Empower employee growth	GRI401,GRI402,GRI403,GRI404,GRI405	S4.1.3,S4.1.5,S4.1.11-4.1.12,S4.2.1-4.2.4,S4.2.6,S4.3.1-4.3.3
	Deepen industry cooperation	GRI204,GRI308,GRI414	S3.1.1-3.1.4
	Enhance people's well-being	GRI415	S1.1.1-1.1.2,S1.1.5-1.1.6,S1.2.1,S1.2.6

Contents		Global Reporting Initiative (GRI Standards)	Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG6.0)
<b>Governance:</b> Promote stability like a rock	Adhere to the leadership of Party building	-	G1.2.1-1.2.3
	Standardize corporate governance	GRI102	G1.1.1-1.1.2
	Comprehensive deepening of reform	GRI102,GRI205,GRI206	G1.1.11,G2.1.1-2.1.4,G2.2.1-2.2.3,S1.3.2
	Innovation-driven development	GRI203	S2.1.1-2.1.3,S2.1.12-2.1.13
ESG management		GRI102,GRI103	G1.1.1-1.1.7,G1.1.9,G1.1.13,G1.3.1-1.3.2
Future prospects		-	A1
Annex	Key performance	-	A2
	Index of indicators	-	A3
	Feedback	-	A6



## Feedback

Dear reader

Thank you for reading the *2024 Sustainable Development Report of Inner Mongolia Bao Gang United Steel Co., Ltd.* We hope you can provide valuable opinions and suggestions by filling out the feedback form and choose any of the following methods to send your feedback to us to strengthen communication and exchange with stakeholders and further enhance the Company's ability and level of fulfilling social responsibilities.

### Securities Financing Department of Inner Mongolia Bao Gang United Steel Co., Ltd.

Address: Room 204, Main Building, Bao Gang United Steel Information Building, Hexi Industrial Zone, Kundulun District, Baotou City, Inner Mongolia  
Tel.: 0472 - 2669527 Email: glgfzqb@126.com  
Post code: 014010 Fax: 0472 - 2669528

1. What type of stakeholder do you belong to?

- Shareholders  Partners  Company management  Employees  Customers  Suppliers
- Government departments and regulatory agencies  Community organizations and NGOs
- Industry and association partners, industry associations and research institutions  News media
- Others (Please specify)

2. Your opinion on this report:

- Fine  Good  General  Poor  Very poor

3. Your evaluation on Bao Gang United Steel's practices in environmental protection:

- Fine  Good  General  Poor  Very poor

4. Your evaluation on Bao Gang United Steel's practices in social responsibility:

- Fine  Good  General  Poor  Very poor

5. Your evaluation on Bao Gang United Steel's practices in company governance:

- Fine  Good  General  Poor  Very poor

6. Do you think the information disclosed in the report is complete:

- Fine  Good  General  Poor  Very poor

7. Do you think the content and layout of this report are clear and easy to understand?

- Fine  Good  General  Poor  Very poor

8. Do you think this report can meet your reading needs?

- Fine  Good  General  Poor  Very poor

9. Your other opinions and suggestions for improving and practicing Bao Gang United Steel's ESG development philosophy and this report:

---



Inner Mongolia Bao Gang United Steel Co., Ltd.  
Fax: 0472-2669000  
Address: Hexi Industrial Zone, Kundulun District,  
Baotou City, Inner Mongolia  
Post code: 014010

